

# Teachers' Perception Toward Assessing Students Based On 21st-Century Skills

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## Abstrak

Penelitian ini bertujuan untuk menganalisis persepsi guru dalam menilai implementasi keterampilan abad ke-21 di Sekolah Dasar Swasta di Kabupaten Badung. Penelitian ini menggunakan desain penelitian metode campuran. Terdapat dua sekolah yang menjadi perwakilan dari Sekolah Dasar Swasta di Kabupaten Badung. Penelitian ini menganalisis kesiapan guru dalam menilai keterampilan abad ke-21 siswa. Empat orang guru dipilih dengan menggunakan metode pengambilan sampel yang mudah. Instrumen yang digunakan dalam penelitian ini terdiri dari kuesioner, catatan anekdot, dan panduan wawancara. Hasil penelitian menunjukkan bahwa guru bahasa Inggris di kedua sekolah memiliki tanggapan positif terhadap memasukkan keterampilan abad ke-21 dalam penilaian mereka. Hal ini ditunjukkan oleh skor rata-rata tanggapan responden yang berarti bahwa para guru menganggap diri mereka siap untuk memasukkan keterampilan tersebut ke dalam penilaian mereka. Skor tersebut termasuk dalam kategori tingkat kesiapan yang tinggi karena mereka merasa telah memasukkan sebagian besar keterampilan dalam instrumen penilaian yang digunakan untuk menilai pembelajaran bahasa Inggris siswa mereka.

**Kata Kunci:** Keterampilan Abad 21, Penilaian, Persepsi Guru

## Abstract

This study aimed to analyze the teachers' perception in assessing the implementation of the 21st-century skills, in Private Elementary schools in Badung Regency. This study used mixed method research design. There were two schools as the representatives of Private Elementary schools in Badung Regency. This study analyzed the teachers' readiness in assessing the students' 21st-century skills. Four teachers were selected using a convenient sampling method. The instruments used in this study comprised questionnaires, anecdotal records, and interview guides. It was found that English teachers in both schools have positive responses toward inserting 21st-century skills in their assessment. This is indicated by the mean score of the respondents' responses which means that the teachers perceived themselves as being ready in inserting the skills into their assessment. The score falls into the category of high level of readiness as they feel that they had inserted most of the skills in the assessment instruments used to assess their students' English language learning.

**Keywords:** 21st-Century Skills, Assessment, Teachers' Perception

## 1. INTRODUCTION

Nowadays, education is not only focused on knowledge but also the attitudes and skills. Knowledge, attitudes, and skills are the main goals of the education. The competence and professionalism of the teachers are needed to achieve those main goals to increase the quality of education. Rusdin (2018) argued that creating a generation that has good quality and be able to deal with 21st-century globalization is the essential thing that should be paid attention by the teachers. The character education is added by the teachers in the teaching and learning process to make school activities effectively and adaptable to the 21st-century era.

In facing this 21st-century era, the Indonesia government must have innovative strategies to develop educational quality. It is being regulated in the National Ministries of Technology, Research, and Higher Education. Gamar et al, (2018) argued that innovative actions should be done to prepare the national human with qualified competences and create a better education for the students. In 21st skills, students are required to be able to have

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literacy skills, skills in science, good attitudes, and mastery of technology (Kemendikbud, 2017). 21st-century skills are an innovative way in improving the quality of human resources, and it is used as the guideline for teaching students.

Trilling and Fadel (2009) presented 21st-century skills as a complex theory. It is not only focused on those four skills but also, they introduced them as theories about the significant changes in human lifestyle and time. Trilling and Fadel (2009) presented 21st-century skills into the 21st-century rainbow figure, which consists of twelve primary skills that have to be mastered by people to make a better life. Those twelve skills classified into three major skills, namely, life and career skills, learning and innovation skills, and information, media, and technology skills.

School is the principal place that can teach 21st-century skills because in school, students will have much time to learn and practice those skills. According to Rotherham and Willingham (2009), the importance of implementing 21st-century skills is to prepare students' readiness. It deals with the complex challenges of their age since 21st-century skills consist of complex skills that very useful in this era. Thus, in the process of teaching and learning, teachers implement 21<sup>st</sup>-century skills in all aspects.

In education, the teaching and learning process is ideally evaluated throughout the instruction. Reece and Walker (1997) introduce four aspects existing in the teaching and learning process. One of those aspects is assessment. Hanna and Dettmer (2004) point out that assessment is a process of gathering information about the students' achievement levels and the strategy used in the process of teaching and learning to get feedbacks that can develop the quality of teaching and learning process. According to Gronlund (as cited in Kusumawati, 2018), assessment refers to a systematic process to determine which instructional goals are already achieved by students. It can be concluded that the process of English teaching and learning will be incomplete without the implementation of assessment. Teachers are expected to insert the skills of 21<sup>st</sup> century in all aspects used to teach the students, one of them is assessment.

In this study, there were some studies provided related to 21<sup>st</sup>-century skills. Padmadewi and Artini (2017) conducted a study that focuses on character building and literacy for 21<sup>st</sup>-century education. The results of this research showed that many techniques implemented at the school. The techniques were literacy and character-based, namely empowering the use of reading log and reading response journals, students' clubs and houses for building characters, and reading different variations of texts. This research also showed the project-based learning, which emphasizes on the students' experiences and creating their new knowledge. The next one is the research conducted by Rusdin (2018). This research was about teachers' readiness in implementing 21st-century learning. The results showed that there is a significant correlation between the academic level and the level of understanding of 21st-century skills and there is a significant difference between the certificate holder and master's degree holder in understanding the skills of the 21st century.

This study focused on the teachers' perception toward assessing students based on 21<sup>st</sup>-century skills. It means that this study investigated the teachers' perception toward the implementation of 21<sup>st</sup>-century skills in the assessment.

## 2. METHOD

The design of this research was sequential embedded mixed-method. This research was conducted in Private Elementary School in Badung regency, especially in SD Taman Tirta and SD Bina Insan Mandiri Sejahtera. These schools were chosen by using random sampling. These schools can be the representative of the private schools that already used Kurikulum 2013 as the system in the teaching and learning process. The subjects of this study

were the English teachers who teach in SD Taman Tirta and SD Bina Insan Mandiri Sejahtera, and also the document. There were several documents analyzed, such as students' worksheets and textbooks used by the teachers and students in English teaching and learning process. The object of this study was the teachers' perception toward the implement of 21<sup>st</sup>-century skills in the assessment used by teachers in assessing the students in private schools.

In collecting the data, there were three methods used, such as questionnaire, interview and the document analysis. The questionnaire was used to gather data from the respondents. The questionnaire was about the teachers' perception toward the assessment based on 21<sup>st</sup>-century skills. Interview was conducted to gain additional information that supports the results of the analysis before. It reconfirmed the data that has been collected through questionnaire and document analysis. Document analysis is a systematic procedure done in this study. It was checked whether the teachers inserted the aspects of 21st-century skills in the assessment or not. There were two instruments used in collecting the data, such as the researcher and the questionnaire that consist of 17 items which were divided into 4 dimensions. Before the instruments used to gain the data from the subjects of the study, the instruments were testing, such as validating and reliability to measure whether the instruments used is valid and consistent or not.

There were two methods used in analyzing the data, such as qualitative and quantitative methods. The quantitative method was used to analyze the expert judgment rubric of the questionnaire's quality to find out the content validity and reliability of the questionnaire and also to analyze the data got from the questionnaires. Besides, the qualitative method was used to analyze the data got from the interview and questionnaire to get additional information.

### 3. RESULT AND DISCUSSION

After the respondents chose the questionnaire about their perception toward the assessment based on 21<sup>st</sup>-century skills in two private schools, that is SD Taman Tirta and SD Bina Insan Mandiri Sejahtera, it was found that they have varied responses. The results of the questionnaire in two different schools can be seen on [Table 1](#).

**Table 1.** The Respondents' Perception in Inserting 21<sup>st</sup>-Century Skills toward the Assessment

No.	Dimension	SD Taman Tirta			SD Bina Insan Mandiri Sejahtera		
		Rating Scale					
		Rarely	Often	Always	Rarely	Often	Always
<b>Life and Career Skills</b>							
	Leadership and responsibility	1 (50%)		1 (50%)			2 (100%)
	Productivity and accountability		2 (100%)				2 (100%)
	Social and cross-cultural skills	1 (50%)	1 (50%)			1 (50%)	1 (50%)
	Flexibility and adaptability		1 (50%)	1 (50%)			2 (100%)
	Initiative and self-direction	1 (50%)	1 (50%)				2 (100%)

No.	Dimension	SD Taman Tirta			SD Bina Insan Mandiri Sejahtera		
		Rating Scale					
		Rarely	Often	Always	Rarely	Often	Always
<b>Learning and Innovation Skills</b>							
	Communication			2 (100%)		2 (100%)	
	Creativity and innovation	1 (50%)		1 (50%)		2 (100%)	
	Critical thinking and problem solving		1 (50%)	1 (50%)		2 (100%)	
	Collaboration			2 (100%)		1 (50%)	
<b>Information, Media, and Technology Skills</b>							
	Information literacy		2 (100%)			2 (100%)	
	Media literacy			2 (100%)		2 (100%)	
	Technology literacy			2 (100%)		2 (100%)	
<b>21<sup>st</sup> Century Themes</b>							
	Civic literacy	1 (50%)		1 (50%)	1 (50%)	1 (50%)	
	Global awareness	1 (50%)	1 (50%)			2 (100%)	
	Financial literacy		2 (100%)		1 (50%)	1 (50%)	
	Health literacy		2 (100%)		1 (50%)	1 (50%)	
	Environmental literacy		1 (50%)	1 (50%)		2 (100%)	
	<b>Total</b>	6 (17.6%)	14 (41.2%)	14 (41.2%)	2 (5.9%)	12 (35.3%)	
						20 (58.8%)	

Based on Table 1, it can be seen that most of the respondents chose “always” in inserting the skills of 21<sup>st</sup>-century in the assessment used to assess their students. There were 41.2% of respondents in SD Taman Tirta and 58.8% of respondents in SD Bina Insan Mandiri Sejahtera chose “always” in the questionnaire. Meanwhile, only few respondents chose “rarely” in the questionnaire, that is 17.6% of respondents in SD Taman Tirta and 5.9% of respondents in SD Bina Insan Mandiri Sejahtera chose “rarely” in inserting 21<sup>st</sup>-century skills in their assessment.

The first dimension was life and career skills. It was found that there was a respondent in SD Taman Tirta chose “rarely” in the items of leadership and responsibility, social and cross-cultural, and initiative and self-direction. Meanwhile, most of the respondents chose “often” and “always”. It means that the respondents of SD Taman Tirta have positive responses toward the assessment based on 21<sup>st</sup>-century skills. In addition, it was found that all respondents perceived that they inserted the life and career skills in the assessment. Most of the respondents chose “always” in the questionnaire. Meanwhile, there was a respondent who chose “often” in inserting the skills of social and cross-cultural in the

assessment. It can be concluded that all respondents have positive responses toward life and career skills since they perceived that they had inserted those skills in the assessment.

The second dimension was learning and innovation skills. The dimension consists of four items, such as communication, creativity and innovation, critical thinking and problem-solving, and collaboration. It was found that most of the respondents in SD Taman Tirta perceived that they inserted the learning and innovation skills in the assessment. Mostly, the respondents chose "often" and "always" in the questionnaire. Only one respondent chose "rarely" in creativity and innovation skills. It means that the respondent was not ready to insert the skills of learning and innovation. It can be concluded that most of the respondents have positive responses toward learning and innovation skills in the assessment. Meanwhile, it was found that all respondents in SD Bina Insan Mandiri Sejahtera perceived that they inserted the learning and innovation skills in the assessment. All respondents chose "often" and "always" in the questionnaire. It means that all respondents have positive responses toward the learning and innovation skills in the assessment.

The third dimension consisted in the questionnaire was information, media, and technology skills. The dimension consists of 3 items given to the respondents in SD Taman Tirta and SD Bina Insan Mandiri Sejahtera. It was found that all respondents in SD Taman Tirta perceived that they had inserted the information, media, and technology skills in the teaching and learning process. The respondents chose "often" and "always" in the questionnaire of information, media, and technology skills. It means that all respondents have positive responses toward the inserting those skills in the assessment. It was found that all respondents in SD Bina Insan Mandiri Sejahtera perceived that they have inserted the information, media, and technology skills in the assessment. The respondents chose "often" and "always" in the questionnaire.

The last dimension that exists in the questionnaire was 21st-century themes. The dimension consists of 5 items related to 21st-century themes, such as civic literacy, global awareness, financial literacy, health literacy, and environmental literacy. It was found that a respondent in SD Taman Tirta chose "rarely" in civic literacy and global awareness. It means that the respondent has negative response in inserting 21st-century themes in the assessment. Meanwhile, most of the respondents perceived that they have inserted 21st-century themes in the assessment since they chose "often" and "always" in the questionnaire. In addition, it was found that not all respondents in SD Bina Insan Mandiri Sejahtera chose "often" and "always" in the questionnaire. There was a respondent chose "rarely" in civic literacy and financial literacy. It means that the respondent was not ready in inserting 21st-century themes in the assessment. Meanwhile, most of the respondents perceived that they had inserted 21st-century themes in the assessment.

Based on the results of the questionnaire of respondents' perception in inserting 21st-century skills and themes in the assessment in SD Taman Tirta, it was found that 17.6% of the respondents chose "rarely", 41.2% of the respondents chose "often", and 41.2% of the respondents chose "always". The total of respondents' responses in the questionnaire were 34 (100%). The mean scores of the questionnaire were 55. Meanwhile, in SD Bina Insan Mandiri Sejahtera, it was found that 5.9% of the respondents chose "rarely", 35.3% of the respondents chose "often", and 58.8% of the respondents chose "always". The total of respondents' responses in the questionnaire were 34 (100%). The mean scores of the questionnaire were 60. The categorization was needed to know the teachers' perception toward the assessment based on 21<sup>st</sup>-century skills in SD Taman Tirta and SD Bina Insan Mandiri Sejahtera based on the results of their responses in the questionnaire. Standard Deviation Ideal (SDi) and Mean Ideal (Mi) were calculated. After calculating Standard Deviation Ideal (SDi) and Mean Ideal (Mi), the range of categorizations was obtained. The categorization of respondents' readiness in inserting 21st-century skills and themes in the

assessment was based on the formula stated by Candiasa (2010). The categorization of the teachers' perception in inserting 21st-century skills and themes in the teaching and learning process can be seen in Table 2.

**Table 2.** The Categorization of the Teachers' Perception in Inserting 21st-Century Skills and Themes in the Assessment

No.	Criteria	Interval	Categorizations
1	$\bar{T} \geq M_i + 1,8 SD_i$	$\bar{T} \geq 59$	Very Ready
2	$M_i + 0,6 SD_i \leq \bar{T} < M_i + 1,8 SD_i$	$48 \leq \bar{T} < 59$	Ready
3	$M_i - 0,6 SD_i \leq \bar{T} < M_i + 0,6 SD_i$	$38 \leq \bar{T} < 48$	Quite Ready
4	$M_i - 1,8 SD_i \leq \bar{T} < M_i - 0,6 SD_i$	$27 \leq \bar{T} < 38$	Not Quite Ready
5	$\bar{T} < M_i - 1,8 SD_i$	$\bar{T} < 27$	Not Ready

The mean scores of the respondents' responses in SD Taman Tirta were 55. The scores were in the interval  $48 \leq (T) < 59$ , it belongs to ready. Meanwhile, the mean scores of the respondents' responses in SD Bina Insan Mandiri Sejahtera were 60. The scores were in the interval  $(T) \geq 59$ , in which it belongs to very ready. It can be concluded that the English teachers in SD Taman Tirta and SD Bina Insan Mandiri Sejahtera perceived that they were ready in inserting 21st-century skills and themes in the assessment.

Assessment is an essential thing in the process of teaching and learning. Assessment plays a crucial role in setting standards and influencing the curriculum used by the schools, so it is expected that assessment has good quality to motivate schools to do more to instill 21<sup>st</sup>-century skills. Anderson (2006) states that the skills and competencies had by teachers required for productive work in innovative professions provide a foundation for designing some aspects related to the process of teaching and learning, one of them is a good quality assessment based on 21<sup>st</sup>-century skills. Scardamalia and Quellmalz (2010) argued that the schools which inserting 21<sup>st</sup>-century skills in the assessment help teachers to increase the pace of innovative.

The results of the questionnaire were supported by the interview conducted to the respondents of SD Taman Tirta and SD Bina Insan Mandiri Sejahtera. The results of the interview showed how the respondents perceived themselves about inserting the skills of the 21st-century in the teaching and learning process. It can be seen in the piece of the interview (B1, SD Taman Tirta).

- I : "Do you think your assessment already based on the 21st-century skill?"  
 "Not all of my assessment based on 21st century skill, but I already insert some  
 B1 : skills in the 21st century in my assessment. For example, I insert productivity skill, communication skill, critical thinking skill when I ask them to make a product."

The existence of 21st-century skills in the assessment was also supported with the results of the interview. It can be seen in the piece of the interview. (B2, SD Bina Insan Mandiri Sejahtera).

- I : "How do you assess your students' competency? Is your assessment based on the 21st-century skill?"  
 "There are 3 ways that I use to measure their skill, first I measure their  
 B1 : understanding after I finish my explanation by ask them some question, the second I measure their understanding in the last part of the chapter by conduct mini quiz,

last I measure their understanding in the end of the semester. I think there are several skills that already insert in my assessment like productivity and accountability, communication skill and also Creativity and innovation.”

#### **4. CONCLUSION**

As the results of this study, it showed that the English teachers in both SD Taman Tirta and SD Bina Insan Mandiri Sejahtera have perceived that they have inserted 21<sup>st</sup>-century skills in the assessment used for assessing students. Since, most of the teachers chose “always” and “often” in the questionnaire. Meanwhile, few teachers chose “rarely” in the questionnaire. It means that the teachers already know how important of 21<sup>st</sup>-century skills is in assessing the students. The assessment used by teachers to assess the students is expected based on 21<sup>st</sup>-century skills since the skills is very beneficial to improve the students' achievement levels. It is suggested for teachers to review the assessment before it is used to assess the students' achievement levels.

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