

Teachers' Readiness in Implementing and Facilitating 21st Century Learning

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Abstract In this technological world, pedagogy has changed in terms of strategy, approach, method and technique. The majority of teachers have limited been exposed to the 21st century teaching and learning strategy and as a result they are still struggling in mastering it. This study was conducted to identify the readiness of teachers towards the 21st Century teaching and learning specifically from the aspect of knowledge, skills and attitudes. A total of 77 language teachers at 15 national secondary schools in Penang were selected as respondents. The data were obtained through a questionnaire which included three aspects of readiness, which are knowledge, skills and attitudes of language teachers. Data were analysed using Statistical Package for Social Sciences (SPSS) version 22.0. The findings show that average mean of knowledge level (min = 4.06, SP = .396) and skills level of Language teachers (min = 3.70, SP = .377) toward 21st century teaching and learning are at high level. In terms of the attitude of Language teachers, the results showed that the mean of attitude was at a positive level (min = 3.77, SP = .390). In addition, the findings showed that there was a significant positive correlation between knowledge with skills ($r = .619$), knowledge with attitude ($r = .601$) and skill with attitude ($r = .673$).

Keywords Teacher Readiness, 21st Century Teaching and Learning, Knowledge, Skill and Attitude

1. Introduction

In this rapid development era, the Malaysian education system has undergone a change and needs to be transformed in order to achieve the goal of the National Education Philosophy. 21st century education had already been implemented in our country to produce a balanced human capital in physical, emotional, spiritual, intellectual

and social series. Partnership for 21st Century learning (P21) which is based on Washington devised, a 21st Century learning concept. P21 (2015) emphasizes that 21st Century learning is the process of applying skills across content and learning competence based on approaches. 21st Century learning is also a process that emphasizes student-centered learning in the production of holistic students (Buletin Anjakan Bil. 5/2015, KPM).

21st Century education focuses on two key aspects which are student-centered learning and 21st century skills (KPM, 2017). The goal of 21st Century learning and facilitating is to produce skilled, productive and capable generation as the leader of the nation. It is undeniable that the 21st Century learning is different compared to the past learning. According to Buletin Anjakan Bil. 4/2015, the most significant difference is that the 21st Century learning is centralized and non-teacher-centered. Additionally, 21st Century learning goals are to learn for life in more practical approach. Furthermore, students also experienced the real situations with problems based on activities through the 21st Century learning in the classroom. The application of various strategies and activities is also one of the key aspects of student learning in the 21st Century learning. Among them include high thinking skills, communication skills, and collaborative skills. 21st Century learning emphasizes more on a group collaboration in order to exchange and share their opinions and ideas. In this regard, the readiness of Language teachers in implementing 21st Century learning and facilitating students is essential in creating an active and effective and interactive environment. Teachers' quality will determine the effectiveness of students in knowledge learning (Buletin Anjakan Bil. 5/2015, KPM).

The 21st Century learning and facilitating is aimed to produce a balanced, harmonious, physical, emotional, spiritual and intellectual human who is in accordance with the National Education Philosophy. Challenges faced by

educators today are the changing of educational pedagogy either in terms of learning and facilitating strategy, approach, method or technique in the classroom. Currently, most scholars claim that language teachers are less likely to implement the 21st Century learning and facilitating (Suzlina Baharuddin & Badusah, 2016, Yahya Othman & Roselan Baki, 2015). This is because language teachers are less exposed to the concept of 21st Century learning and how to facilitate students. This causes the teachers not to diversify the teaching approach in the classroom. Therefore, the lack of knowledge and skills towards the concept has led teachers not to do so (Sandra Rahman, Abu Bakar Nordin & Norlidah Alias, 2013). In brief, the readiness of Language teachers towards the 21st Century learning and facilitating is essential to improve the successes and effectiveness of student learning.

1.1. Research Objective

The general objective of this study is to identify the readiness of Language teachers that are teaching at Seberang Perai Selatan, Penang National High School in the process of 21st Century learning and facilitating in the classroom. Specific objectives in this study are:

1. Identify the level of knowledge of Language teachers towards the 21st Century learning and facilitating.
2. Identify the existing skill level of Language teachers in the 21st Century learning and facilitating.
3. Identify the attitude of Language teachers towards the 21st Century learning and facilitating.
4. Identify the relationship between knowledge, skills and attitude of Language teachers in the 21st Century learning and facilitating.

1.2. Research Questions

Research questions are:

1. What is the teacher's knowledge level towards the 21st Century learning and facilitating at National High School in the SPS area?
2. What is the level of existing skills of Language teachers in the 21st Century learning and facilitating at National High School in the SPS area?
3. What is the attitude of Language teacher towards 21st Century learning and facilitating at National High School in the SPS area?
4. What is the relationship between the knowledge, skills and attitude of Language teachers towards the 21st Century learning and facilitating?

2. Teacher Readiness

21st Century learning and facilitation is a student-centred learning and the application of multiple skills. Some of the teaching approaches include the application of high level thinking skills, the use of information technology, and project-based learning. The appropriateness of the teaching strategies contributed a high impact on a meaningful learning in the classroom. Therefore, teachers' preparation of knowledge, skill and attitude towards the 21st Century teaching is extremely crucial and should take into account.

Norabeerah, Halimah & Azlina (2012) studied the competency of 118 teachers in the Federal Territory of Putrajaya. The results showed that the level of knowledge and understanding of the application of thinking skills in teaching is at a moderate level. On the other hand, Nor Hasmaliza Hasan & Zamri Mahamod (2016) studied 226 teachers' perceptions on the application of thinking skill strategies, indicating that the level of teachers' knowledge is at a moderate level.

In addition to thinking-based learning, the use of information technology is also considered as one of the 21st century teaching and facilitating strategies. Maimon Aqsha Lubis, Nurul Syuhada & Mohd Isa Hamzah (2017) study on teacher readiness for multimedia use in teaching shows that teachers' knowledge level is at a high level. This shows that language teachers know how to convey teaching using computers and software. In line with above research, study by Suzlina Baharuddin & Jamaluddin Badusah (2016) related to knowledge, skills and attitude of Malay Language teachers in Web 2.0. application, found teachers having a high level of knowledge about internet usage teaching strategies.

However, study by Yahya Othman & Roselan Baki (2015) on the application of computers in the Hulu Langat, Selangor school district found that teachers hardly use the computers in teaching. Like what Simah Mamat (2017) mentions about the relationship between the level of ICT skills of 297 language teachers and the use of information and communication technology skills of teachers is at a moderate level.

Halimah Badioze Zaman & Azlina (2012) conducted a study on the awareness level of 44 teachers on the use of Augmented Reality (AR) in teaching Malay Language showing that teachers are at positive perception of the appropriateness use of AR in teaching. Siti Zabedah Ab. Ghani (2002) also made a study of teachers' attitudes towards language skills teaching. The results show that they have a positive attitude towards the use of information technology skills in the implementation of stimulus variation.

In conclusion, many studies have shown the skill level of language teachers is at a moderate level despite being positive and optimistic about those techniques that are constantly changing.

3. Methodology

3.1. Research Design

This study used a quantitative survey design. According to Chua, Y. P. (2011), survey research is a method often used by researchers, especially in the field of social science. The function of the survey research is to describe and forecast the current phenomenon (Khalid Johari, 2003).

The survey was conducted to examine the readiness of Language teachers in 21st Century learning and facilitating in the National High School district of Seberang Perai Selatan. This study was started with the selection of respondent. Subsequently, the researcher distributed the questionnaires to the respondents of the study. Then, the data collected were analyzed through the Statistical Package for Social Sciences (SPSS) version 22.

3.2. Sampling

The population is an individual group or unit of interest that has the same characteristics (Hanlon, B. & Larget, B., 2011). The population selected in the study was the teachers of Malay Language who teach in national high schools. This study used a non-probability sampling method in selecting the respondents of the study, which is a purposive sampling. According to Wiersma, W. (1991), purposive sampling is the selection of individual groups based on the characteristics associated with the study problem. Related to that, this study focuses on 77 Language teachers who teach at 15 National High School district of Seberang Perai Selatan, Penang.

3.3. Instrument

The research instrument used in this study is a questionnaire. The researcher was able to identify the readiness of language teachers towards the implementation of 21st Century learning and facilitating in National High School district of Seberang Perai Selatan through the distribution of questionnaires. The questionnaire consists of four parts: part A (demography information), part B (Knowledge), C (Skills) and D (Attitude). The Likert-5 scale has been applied in the measurement to make it easier for respondents in responding and having higher reliability (Chua, Y. P., 2011).

3.4. Data Analysis

The respondents included 77 teachers who teach Malay Language subjects in a high school. Before conducting research, the instrument contents were verified and had a high reliability value of .932. The data collected were analyzed using Statistical Package for Social Sciences (SPSS). Descriptive analysis and inference analysis have been applied in this study to explain the findings.

4. Research Findings

The findings of the study showed that the level of readiness of secondary school Language teachers to implement 21st Century learning and facilitating was at a high level ($M = 3.84$). Besides that, this study also indicated the result in three aspects of knowledge, skills and attitude of Language teachers.

4.1. Teachers' Knowledge toward 21st Century Learning & Facilitating

Based on Table 1, the findings showed that the knowledge level of the Language teachers in whole research was at a high level with mean 4.06 ($SD = .396$). Item B4 'PAK21 is a student-centered, material and activity teaching that gets the highest mean in this study ($min = 4.43$, $SD = .498$). While B18 item 'teaching aids such as puppets can attract students' learning', which gets the lowest mean ($M = 3.86$, $SD = .738$). In conclusion, this study shows that language teachers have a high knowledge level in 21st Century learning and facilitating.

Table 1. Teachers' Knowledge toward 21st Century Learning & Facilitating

Item	Mean	SD	Interpretation
<u>Highest Mean</u> B4. PAK21 is a student-centered, material and activity teaching.	4.43	.498	Very high
<u>Lowest Mean</u> B18. Teaching materials such as puppets can attract students to learning.	3.86	.738	High
Overall	4.06	.396	High

4.2. Teachers' Skills toward 21st Century Learning & Facilitating

Table 2 showed the summary findings of the language teachers' skills towards the 21st Century learning and facilitating. This study found that the skill level of language teachers towards the 21st Century learning and facilitating was at a high level ($M = 3.70$, $SD = .377$). The results indicated that the skill level of guiding and assisting of Language teachers was high with the highest mean ($M = 3.92$). On the other hand, the level of information technology skills is at a moderate level even with the lowest mean. In brief, language teachers have a high level of skill in the 21st Century learning and facilitating.

Table 2. Teachers' skills toward 21st Century Learning & Facilitating.

Item	Mean	SD	Interpretation
<u>Highest Mean</u> C20. I was able to guide and help students that are poor in learning.	3.92	.532	High
<u>Lowest Mean</u> C16. I'm good at using computers in implementing PAK21 in the classroom.	3.44	.819	Moderate
Overall	3.70	.377	High

4.3. Language teacher's Attitude towards 21st Century Learning & Facilitating

Based on Table 3, this study indicated that Language teachers respond positively to 21st Century learning and facilitating. The findings showed that language teachers agree with item D10 'I believe that my willingness and ability to implement learning and facilitating are important (Mean = 4.04, SD = .443).

Table 3. Language Teachers Attitude towards 21st Century Learning & Facilitating.

Item	Mean	SD	Interpretation
<u>Highest Mean</u> D10. I believe that my willingness and ability to implement learning and facilitating is important.	4.04	.443	Very Positive
<u>Lowest Mean</u> D8. I believe the implementation of 21 st learning can improve student academic achievement.	3.65	.774	Positive
Overall	3.77	.390	Positive

Furthermore, the language teachers are also positive to the statement of 'implementation of the 21st Century learning, which can improve the students' academic achievement' despite with the lowest mean. This could be concluded that language teachers are positively agreed towards the implementation of 21st Century in learning and facilitating.

4.4. Relationship between Knowledge, Skill and Attitude

Table 4 shows the results of the study on the relationship between knowledge, skills and attitude of language teachers towards the 21st Century learning and facilitating. Pearson's correlation analysis shows that there is a significant positive relationship between the knowledge, skills and attitude of Malay teachers towards the 21st Century learning and facilitating with a moderate relationship (Connoly & Sluckin, 1971).

Table 4. Relationship between Knowledge, Skills and Attitudes

	Mean of Skills (Correlation coefficient, r)	Interpretation
Mean of Knowledge	.619**	Moderate positive relationship

	Mean of Attitude (Correlation coefficient, r)	Interpretation
Mean of Knowledge	.601**	Moderate positive relationship

	Mean of Attitude (Correlation coefficient, r)	Interpretation
Mean of Skills	.673**	Moderate positive relationship

** is significant at the 0.01 level

5. Discussion

5.1. Teachers' Knowledge

The findings show that the level of Language teachers' knowledge in 'PAK21 is a student-centered, material and activity teaching' that was at a high level. This result is consistent with the study of Norliza Brahim (2012) which shows the concept of project-based learning as a student-centered learning method at a high level. In addition, the item 'Teaching materials such as puppets can attract pupils in learning' was at a high level. Study of Masroha Sepian (2010) also shows that 88% of teachers agree that the use of compact discs as a material can produce fun learning atmosphere. Finally, a high level of knowledge can improve readiness and ensure the quality of teaching Language teachers in schools.

5.2. Teacher' Skills

This study demonstrates the level of skill in guiding and assisting of Language teachers is high. The results of this study are not consistent with the study conducted by Norliza Brahim (2012) which demonstrates the moderate skills of guiding and assisting teachers in project-based learning. Meanwhile, the use of information technology level in Language teachers in this study is moderate. This finding is consistent with the study of Simah Mamat (2017) which shows that level of Language teachers in using information technology in the process of learning and facilitating is moderate. In conclusion, Language teachers need to understand and master the 21st century skills to deliver effective teaching to students.

5.3. Teacher' Attitude

The findings of this study indicate that Language teachers negatively respond to the statement 'Lack of time in implementing the 21st Century learning and facilitating'. The results of the study were in accordance with the study of Norliza Hj Brahim (2012) which showed that 73.8% of Language teachers stated that they did not have enough time to implement PBL in the classroom. Meanwhile, Language teachers are be positive toward the item 'I believe implementation of 21st Century learning can improve student academic achievement' despite the lowest mean. The findings of this study are consistent with research of Syed Kamal Azira Syed Mohamad Zain (2015) which shows that Language teachers are confident that the use of ICT can improve student academic achievement being at high level. In short, teachers need to change and accept the changes that take place in a positive attitude.

5.4. Relationship between Knowledge, Skill and Attitude

The result of this study shows that there is a significant positive relationship between the knowledge, skills and attitude of Language teachers towards the 21st Century learning and facilitating and a moderate relationship. The findings of this study were consistent with the results of the study of Norliza Brahim (2012) which showed moderate positive significant relationship between the three variables.

6. Conclusion

In conclusion, the readiness of language teachers is very important in implementing the 21st Century learning and facilitating to create an active and fun learning environment. This is because the teacher plays an important role in the realization of the educational transformation desired by the Ministry of Education. In addition, the findings of the study shows that knowledge, skills and attitude of teachers are very important and influence each other in increasing readiness. Therefore, Language teachers should always be prepared to improve their quality with the development and change of times.

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