The Great Challenge of Malaysian School Leaders' Instructional Leadership: Can It Affect Teachers' Functional Competency across 21st Century Education?

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Abstract Competency is the basis for the combination of teachers' skills, knowledge, and behaviors that must strive to enhance their ability in the education world. Each component should be integrated holistically to support the teachers' effectiveness, administration, and school excellence. Therefore, this study focused on the relationship between school leaders' instructional leadership and teachers' functional competency. It also identified which factors in instructional leadership contributed to teachers' functional competency in Malaysia context. A total of 225 teachers from the high-performance school in the state of Kedah were selected as participants. Meanwhile, the instrument in this research was adapted from the Principal Instructional Management Rating Scale (PIMRS) to measure school leaders' instructional leadership. In contrast, the instrument for teachers' functional competency was adapted from the Integrated Assessment Module for Education Officers (PBPPP) and developed by the MOE Curriculum Development Division. The findings showed that there was a very strong and positive relationship between school leaders' instructional leadership and teachers' functional competency (r=.956, p=.00). At the same time, multiple regression analysis revealed that there were three components of the independent variable explaining the variance as 15.1% of teachers' functional competency (R^2=.151, F (2, 214)=80.74, p<0.01). Admittedly, the School Learning Climate Promoting component had the most significant impact on teachers' functional competency, followed by Managing the Curriculum and Teaching and ending with the Defining School Mission. In conclusion, the role of instructional leadership has proven to enhance the teachers' functional competency through the current stream of education, teaching, and learning processes. Sustainable leaders can influence teachers towards improving school excellence together to face the 21st century educational challenges.

Keywords Instructional Leadership, Core Competency, Teachers’ Functional Competency, School Learning Climate, 21st Century Education

1. Introduction

Education is not an easy concept because it requires careful planning. Not only does the education system operate as an agent of knowledge, but it also plays a more significant role in developing a nation that can compete internationally [1]. To improve the quality of education in Malaysia, the Ministry of Education Malaysia (MOE) has taken one step further by introducing the Malaysia Education Blueprint 2013-2025. This situation is a need to strengthen and make improvements to the previous education system plan, which is the Education Development Plan 2001-2010. Nevertheless, MOE's priority is to increase teachers' efficiency, competency, and integrity in the areas of education management and administration [2], [3]. As such, the elements of organizational management and teachers' teaching are so closely linked that they dominate excellence in national education. There is no denying that education is the foundation for the formation of knowledgeable people who have inherited it for generations.

Teachers are the most important individuals in the successful implementation of the national curriculum and they are a key element in improving the quality and excellence of education. In this case, quality teachers are able to change the situation from backward to upward in a student's performance in learning [4]. Attitudes such as credibility, commitment and earnest effort for the development of learners are among the factors that enhance teachers' quality of their professional work.
According to a study from the [5], 83% of teachers expressed an interest in talking about education-related competencies. Out of that, 75% of teachers agreed that competency in education is very helpful in improving their professional quality. Teachers with high levels of competency have the potential to systematically plan for student achievement and excellence in learning. Because of this, the competence of teachers is very much needed especially to bring about changes in the education system towards 21st century education.

It is undeniable that an increase in teachers' competency will come through an authoritative instructional leader. As a ship captain, a leader is a great hero in his organization and has a significant influence on moving his subordinates to achieve their goals together. In terms of education, instructional leaders are the backbone of teachers in applying existing competencies to translate into their teaching professionals [6]. It is clearly stated in the study by [7] that leaders who emphasize improving aspects of teaching can certainly boost collective teachers' efficacy while also enhancing student achievement in academics. Generally, leaders place teachers as the most trusted individuals, successfully elevating the dignity of teachers as a visionary and highly respected educator.

To succeed in today's increasingly stressful 21st-century education, leaders need to find new initiatives in moving the school organization in line with that goal. According to [8], instructional leaders in schools should emphasize the experience and competence of teachers to make teaching and learning processes more effective by using the latest technology. In other words, a high performing culture among teachers is highly demanding to develop through the existing competencies supported by the latest technology devices. This means that the role of instructional leadership must be enhanced in simplifying procedures, providing allocations and improving equipment, and access to digital resources. This case is also in support of the MOE’s aspiration to educate all educators to prepare for the onslaught of educational and economic challenges that will intensify in the 21st century, at least for the next five years [8].

1.1. Problem Statements

In the success of 21st-century education, issues of teaching and learning are definitely on our minds. These include the process of providing high-quality teachers, adequate competencies, as well as resources and infrastructure that enable them to improve learning. However, there are concerns that the 2012 PISA report found that Malaysian secondary school academic achievement was third in the lower half, and it was significantly lower than other Southeast Asian countries such as Vietnam and Thailand [9]. These concerns raise the question of whether Malaysia has put less emphasis on educational growth, teacher competence, or the role of school leaders in invoking such unpredictable decisions. According to [3], Malaysia is one of the countries with the most massive budget in the world to improve the quality of education. The reality is that there is still a lack of coordination among instructional leaders in schools in promoting teachers’ functional competency.

If this situation is real, then what action should the management take to address this problem? To be realistic, educational change in the organization should begin with the role of school leaders as well as the willingness of teachers to draw on existing competencies to generate better quality education. According to a study of scholars in the field of leadership, it explained that there is no more critical way than to use the instructional leadership approach to generate more effective teacher behavior in teaching [10]. This situation will indirectly lead to more exceptional student achievement [11]. In simple words, there is no other way to enhance the effectiveness of teaching and learning unless the teacher can fully utilize the existing competencies.

The MOE has previously established a particular standard of professionalism to cultivate accountability for quality leaders at all levels of an educational organization in line with the best practices of international leadership [3]. This situation should not be underestimated because the standards designed to help school leaders organize and manage organizations focusing on practical education. According to the former Director-General of Education Malaysia [12], instructional leadership is an agent that promotes positive change in the learning environment and is responsible for ensuring that students can cope better with the learning process. He added that school leaders should develop strategies to ensure that teacher teaching and student learning processes are implemented more effectively and to ensure that academic management matters are systematically managed. Nonetheless, the reality of the role played by school leaders is still less effective, which resulted in previously planned programs have not achieved their goals, especially in improving teachers’ competence [13].

1.2. Research Objectives

The objectives of this study are as follows:
(a) To identify the relationship between school leaders’ instructional leadership and teachers’ functional competency,
(b) To identify the effect of school leaders’ instructional leadership on teachers’ functional competency.

2. Literature Review

2.1. Competency Model and Theory

Competency is defined as generic skills, necessary skills, primary skills and personal skills based on individual knowledge, skills and attitudes to carry out
tasks assigned across multiple fields [14]. Meanwhile, [15] defines competence as a combination of the knowledge, skills, and personalities of individuals in performing a given job or position. Competency enables the individual to integrate existing knowledge and skills to perform tasks more efficiently [16].

Obviously, competency encompasses three crucial aspects: knowledge (cognitive), attitude (affective) and skills (psychomotor) that are generated to accomplish any task to achieve particular objectives [17]. Therefore, a competency-based approach is a crucial weapon for an individual to practice certain characters in performing the tasks assigned to them. This situation is clearly illustrated by [18] where the design of the core competency framework is crucial for an individual to develop his or her talent in a given job or position. Core competency tells us that traits such as knowledge, skills, attitudes, motives or personal values are the most critical aspects in determining employee’s excellence.

Based on the competency model developed by [19], each skill and knowledge can be acquired through participation in courses or training based on their academic qualifications. Ongoing training, including related courses, is a vital element in developing an individual's potential for coping with future challenges. Through Figure 1, competency is like an iceberg where an individual's skills and knowledge begin at the top of the iceberg on the sea surface. The personality traits of a person are well below the water level and may be difficult to anticipate and explore. However, the skills and knowledge of the individual are not sufficient to reflect the hidden personal characteristics as these aspects are also the most critical focus for comparing a high performing or low performing employee.

In Figure 1, the Iceberg Competency Model is divided into two parts. The surface above the water makes up the knowledge and skills. Both of these elements are very important for making a job more efficient and creating excellence. However, the other four aspects below the surface also contribute to an individual's competence. Elements such as social roles, self-image, traits, and motives also contribute to competency in performing a task. Although competency is divided into two groups, some studies have shown that behavioral competency is an accurate indicator of differentiating employee's level of excellence. In simple terms, not all skills and knowledge determine an employee's performance as they may reflect biases toward minorities, women or individuals with disabilities [20].

![Image of Iceberg Competency Model]
The study was conducted through a quantitative approach, using a questionnaire of a five-point Likert scale. Implementation using quantitative methods has many advantages such as systematic execution, uniform data and easy to translate as reports [24]. Therefore, SPSS version 23 software was used to generate information through specific tests such as Pearson correlation analysis and multiple regression analysis. Each of these analyses...
was conducted to address the objectives of the study, which was to identify the relationship and influence of school leaders' instructional leadership on teacher functional competency. The study participants consisted of teachers teaching at a high-performance school in Kedah, Malaysia. Simple random sampling was applied to select the participants of the study.

Generally, simple random sampling is the best method of selecting a study sample as it is suitable for determining participants with similar characteristics. Also, another advantage of simple random sampling is that each population has an equal chance of being selected as participants as long as they are not related to other samples [25]. The sample selection also refers to the sample determination table submitted by a well-known scholar [26]. Based on this schedule, a total of 225 teachers working in high-performing schools in the state of Kedah were selected as participants in the study.

As this study examined instructional leadership, selected participants were asked to give their views based on their perception of their school leaders. Therefore, a particular requirement must be fulfilled by each participant:
(a) participants must be regular teachers
(b) serve the school leader for at least six months
(c) not among middle school leaders
(d) has no record of conflict with school leaders

3.2. Instrumentation

The instruments in this study involved three main parts. The first part (part A) was participants' demographics of gender, age, ethnicity and educational background. Part B contained items for the school leader's instructional leadership variables. Then, section C was the items on the teachers' functional competency. For school leaders' instructional leadership, the instrument used was adapted from the Principal Instructional Management Rating Scale (PIMRS) created by [22]. Meanwhile, the Integrated Assessment Module for Education Officers (PBPPP) instrument developed by the MOE Curriculum Development Division [27] was used to measure teachers' functional competency.

This instrument was compatible with the theories of teachers' functional competency as well as school leaders' instructional leadership. This was made clear through the test of validity and reliability. Based on previous studies, Cronbach's alpha values for all components of school leaders' instructional leadership were approximately 0.9 [28]. Besides, researchers have also tested the validity and reliability of the teachers' functional competency instrument where each item and component has a Cronbach's alpha value of 0.7 to 0.9. This situation proved that the questionnaire used in this study has a high degree of validity and reliability. The reliability of the tool is an important issue and debated when researchers make adjustments. Adapted instruments should be compatible and appropriate when studies were conducted on different participants [29].

4. Findings

4.1. The Relationship between School Leaders' Instructional Leadership and Teachers' Functional Competency

Pearson correlation analysis was a test performed to determine the relationship between the two study variables. This analysis also served to identify the strengths of school leaders' instructional leadership and teachers' functional competency. The strength of the variables in this study is interpreted as in Table 2 below.

<table>
<thead>
<tr>
<th>Correlation coefficient value (r)</th>
<th>Relationship Strength</th>
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</thead>
<tbody>
<tr>
<td>1.00</td>
<td>Perfect Relationship</td>
</tr>
<tr>
<td>0.80 – 0.99</td>
<td>Very Strong</td>
</tr>
<tr>
<td>0.60 – 0.79</td>
<td>Strong</td>
</tr>
<tr>
<td>0.40 – 0.59</td>
<td>Average</td>
</tr>
<tr>
<td>0.20 – 0.39</td>
<td>Weak</td>
</tr>
<tr>
<td>0.01 – 0.19</td>
<td>Very Weak</td>
</tr>
<tr>
<td>0.00</td>
<td>No Relationship</td>
</tr>
</tbody>
</table>

Based on Pearson correlation analysis, it was found that the relationship between school leaders' instructional leadership and teachers' functional competency was very strong and significantly correlated ($r = 0.956$, $p = 0.000$). This situation proved that school leaders in the state of Kedah who practiced instructional leadership created a significant rise in teachers' functional competency. Table 3 shows the Pearson correlation analysis performed on the two variables.

<table>
<thead>
<tr>
<th>Table 2. The Strength of Relationship between Variables</th>
</tr>
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<tbody>
<tr>
<td>School Leaders’ Instructional Leadership</td>
</tr>
<tr>
<td>Teachers’ Functional Competency</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>225</td>
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<table>
<thead>
<tr>
<th>School Leaders’ Instructional Leadership</th>
<th>Teachers’ Functional Competency</th>
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<tbody>
<tr>
<td>N</td>
<td>.956**</td>
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**Correlation is significant at the level of confidence 0.01
4.2. The Contribution of School Leaders' Instructional Leadership Components to Teachers' Functional Competency

In this study, three components tested as independent variables were Defining the School Mission, Managing the Curriculum and Teaching, and Promoting School Learning Climate. Multiple regression analysis tests were used to test which components contributed significantly to teachers' functional competency. The three components of the independent variable were classified as Component 1 (X1), Component 2 (X2), and Component 3 (X3), while the independent variable was teachers' functional competency (Y). Based on multiple regression tests, it was found that all three components showed significant values with Component 1 (β = 0.194, p < 0.05), Component 2 (β = 0.289, p < 0.05), and Component 3 (β = 0.304, p < 0.05).

In simple terms, these three components were predictors for teachers' functional competency among high-performance school teachers in the state of Kedah. The regression equation can be expressed as follows:

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \]

Teachers' Functional Competence (Y) = 3.101 + 0.194 X1 + 0.289 X2 + 0.304 X3 + \varepsilon

From the multiple regression analysis results, it was found that all three independent variables accounted for 15.1% of the variance in the dependent variable (R² = .151, F (2,214) = 80.74, p <.01). Among the three independent variables, the Promoting School Learning Climate component showed the strongest effect (β = 0.304, p < 0.05) and had a significant effect on teachers' functional competency. Besides, the Managing the Curriculum and Teaching component also contributed significantly (β = 0.289, p < 0.05) to teachers' functional competency, while the third component, Defining the School Mission was relatively low but still significant (β = 0.194, p < 0.05) in contributing to teachers' functional competency.

5. Discussions

This study was conducted based on two research objectives. The first objective was to identify the relationship between school leaders' instructional leadership and teachers' functional competency. The results of the Pearson correlation analysis showed that there was a strong positive relationship between school leaders' instructional leadership and teachers' functional competency. In essence, the findings suggested that instructional leadership was the best practice in improving teachers' functional competency, thereby enhancing student academic achievement and school performance.

At the same time, Pearson's correlation analysis also revealed a moderate but significant positive relationship between school leaders' instructional leadership and components of teachers' knowledge in functional competency. The findings also showed a weak but significant correlation between school leaders' instructional leadership and teacher skills components. Meanwhile, the results of the multiple regression analysis revealed 15.1% of the variance of school leaders' instructional leadership, contributed in influencing teachers' functional competency. These influences came from independent variables that include Defining the School Mission, Managing the Curriculum and Teaching as well as Promoting School Learning Climate.

A recent study [30] found that teachers' competency has a positive and significant relationship with organizational performance. According to her research, teachers with high competency are present from those who are knowledgeable in the subject matter, have strong pedagogical skills and are skilled in managing students in any situation. This knowledge and expertise have had the most significant impact on improving student academic achievement and led to excellence in school performance. Therefore, the findings of [30] have been substantiated and supported by the research conducted. Also, this study supports the results from [31], which showed that teachers' competency is a crucial catalyst for student learning. He also demonstrated that teachers who master the content of the subject could provide students with expert knowledge and thus build their confidence to further their academic achievement.

Besides, this study is also in line with findings from [32] in which her study found teachers' competency in using information and communication technology (ICT) facilities stimulate students' academic achievement. They added that teachers should have the knowledge and skills in ICT such as selecting, creating and using existing technology resources to develop their learning potential to the next level. In simple terms, teachers' mastery of functional skills will make teachers more visible when using the latest technology. This study is also supported by [33], who acknowledges that ICT knowledge and skills are a catalyst for their performance improvement and competence. Studies involving mobile technology conducted by [34] also agree that teachers' knowledge and skills in using the device can enhance student engagement and help teachers diversify their teaching strategies more efficiently.

Clearly, the findings of this study led to contributions in the field of teachers' functional competency. Notably, the results also suggested that teachers' functional competency can improve upon with the emphasis of a school leader who practices instructional leadership. Through this study, a guide or direction can apply to teachers that the need for functional competency is enhanced over time so that they can do a better job. As a result, teachers will be able to improve the quality of
teaching and learning, resulting in high performing students in various fields. Indeed, a teacher of high competence will strive to guide and be attentive to the problems faced by students as well as to be committed to the job [35]. Awareness of the importance of competency should be taken seriously by the MOE so that proactive action is taken to provide a variety of strategic plans to enhance teachers' functional competency.

6. Conclusions

Through this study, it proves that the teachers' functional competency developed by the Curriculum Development Division, MOE is an excellent tool. The instrument was first used in 2014 and has been used as a mandatory module by the PBPPP to identify teachers' competency levels in schools. The effectiveness of this study has provided new inputs for related parties to use the module more widely in the future. Fundamentally, the MOE's sincere efforts aimed at encouraging teachers to enhance their skills and knowledge in various aspects so that their competency in education is at a higher level. Multiple initiatives have been made to improve teacher competencies such as providing courses, training, workshops, knowledge sharing, seminars, scholarly writing, benchmarking visits and implementing professional learning communities (PLCs) in each school organization. Through the encouragement of instructional leadership, every effort by teachers to enhance functional competence will become more and more real.

At the end of the study, the researchers developed a 21st-century teaching and learning model (PAK-21) for high-performing schools. The model consisted of two study variables, namely school leaders' instructional leadership and teachers' functional competency. For school leaders' instructional leadership, the components involved were Defining the School Mission, Managing the Curriculum and Teaching and Promoting School Learning Climate. This model was also created based on teachers' functional competencies such as attitude, skills, and knowledge. The PAK-21 model for high-performing schools is illustrated in Figure 2.

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