

Instructional Leadership Practice Among Senior Leaders in Malaysia Primary Schools

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ABSTRACT

The study intends to explore the instructional leadership practice among the Seniors Leadership Team (SLT) of five schools selected in Malaysia as pilot schools for the 21st Century Education. Four main dimensions underpin this study. The dimensions can, in essence, be translated into four leadership skills firstly to define and establish school goals, secondly to manage instructional programs, third to promote a conducive learning environment and fourth to create a friendly and cooperative school environment. The data for this study was obtained from a questionnaire survey involving 320 respondents comprising teachers from the five schools concerned. Data were analysed using SPSS. The results showed that practices of Instructional Leadership were evident among the Seniors Leadership Team (SLT) of all five schools. However, the results also seemed to point to the second dimension's practice of managing instructional programs being low compared to the other three dimensions. The overall findings, however, support that the practice of Instructional Leadership among the Seniors Leadership Team (SLT) of the schools studied, was at a very high level.

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Contribution/Originality: This study contributes to the very few research conducted in primary schools on instructional leadership among senior leaders in Malaysia. The research outcome further strengthens the support that the practice of instructional leadership among senior leadership team is aligned towards the vision of Kementerian Pendidikan Malaysia.

1. Introduction

Various changes in the education field are taking place in Malaysia to achieve world-class educational excellence. According to [Jamelaa and Jainabee \(2011\)](#), a change is natural, and educational change will occur when there is a rapid change in the economic, political, and social aspects of a nation. Malaysia as a developing nation inevitably faces the global wave of 21st century and fine-tune our education towards incorporating information and communication technology (ICT) and it has been accepted as a norm for the recent years ([Aziz et al., 2019](#)). Furthermore, in the last few years, learning in the twenty-first century has relied on the integration of information and communication technology (ICT) into the educational setting; this has become the new normal ([Aziz et al., 2019](#)). Based on these changes, the Ministry of Education Malaysia (MOE) has improved the national education system, and the Interim Strategic Plan 2011-2020 has been launched to implement several educational transformations ([Kementerian Pendidikan Malaysia, 2013](#); [Performance Management and Delivery Unit \[PEMANDU\], 2010](#)). Among them is the introduction of the Malaysian Education Development Plan (MEDP) 2013-2025.

In the vibrancy of the Ministry of Education Malaysia to implement transformation, an important thing to note is the awareness of the Seniors Leadership Team (SLT) in schools in terms of instructional leadership so that the transformation of national education can be achieved successfully ([Kementerian Pendidikan Malaysia, 2012](#)). In primary school educational institutions, the role of the Senior Leaders Team consisting of the Headmaster and Senior Administrative Assistant, Senior Assistant of Pupil Affairs, and Senior Assistant of Co-curriculum is very important where their leadership style can influence and affect the level of change and reform in the school ([Jackson et al., 2000](#); [Marzano, 2003](#)).

Leadership usually occurs when a person encourages, persuades, and influences others to work toward the achievement of a particular objective ([Clark, 2009](#); [James & Balasandran, 2013](#)). According to [Abdul, Aziah and Tan \(2008\)](#), instructional leadership or also known as teaching leadership is defined as a process of designing and translating insights into the formal curriculum by optimizing all available resources through educational strategies along with the acquisition of all teaching-learning experiences and ensuring that educational plans are implemented effectively based on the National Philosophy of Education (FPK).

Based on those definitions, it can be concluded that instructional leadership is a process in which a Headmaster, Senior Administrative Assistant, Senior Assistant of Pupil Affairs, and Senior Assistant of Co-curriculum who acts as Senior Leaders Team influence the behavior of teachers, students, and school staff to receive guidance toward achieving certain goals and objectives ([Kis & Konan, 2014](#); [Krug, 1992](#); [Drake & Roe, 2002](#)).

1.1. Research Objectives

In general, the objectives of this study implemented based on three things as follows:

- i. To identify the level of instructional leadership practice of the Senior Leaders Team as leaders in the 21st Century Education Pilot Schools in Malaysia.
- ii. To identify the level of implementation of the 21st Century Education Senior Leaders Team as mentors in the 21st Century Education Pilot Schools in Malaysia.
- iii. To identify whether there is a significant relationship between the instructional leadership practices of the Senior Leaders Team with the implementation of 21st Century Education in 21st Century Education Pilot Schools in Malaysia.

2. Literature Review

School Senior Leaders Team is often the focus in schools because school excellence is dependent on the effectiveness level of the school Senior Leaders Team. In 21st Century Education, the practice of instructional leadership is highly relevant and acceptable to school excellence (Hallinger, 2011a, 2011b, 2000, 1987). The effectiveness of instructional leadership practices is also stated in the Education Development Master Plan (Kementerian Pendidikan Malaysia, 2007; Kementerian Pendidikan Malaysia, 2012). In their study, Hallinger and Heck (1996) found that less clear goals make them difficult to share and achieve in school people.

According to Hallinger and Heck (1998), Leithwood and Jantzi (2000), Robinson et al., (2008), the element of setting clear goals can help the Senior Leaders Team lead the direction of the school for successful teaching and learning. The group of Senior Leaders Team as the school's driving force is the cause of the excellence and failure of the school. The importance of having leaders who can bring change to the school is undeniable. Therefore, Headmasters and Senior Assistants as a Group of Senior Leaders Team need to lead their schools by developing the characteristics of such leadership practices to ensure positive change in the school align with the vision and mission of the respective schools. Based on this issue, an important question emerged to be studied: the level of instructional leadership practiced by the Senior Leaders Team in the pilot primary school for 21st Century Education.

One of the nine competencies in the Malaysian School Leadership Competency Standard (SKKSM) recommended by the Malaysian Ministry of Education is Curriculum Management. Curriculum Management is closely related to school leaders as teaching leaders or instructional leaders. Instructional leadership must come from both sides, namely the administrator himself and the teachers. This is because teachers have the necessary knowledge and experience in one field to deliver instruction in the classroom. The task of the administrator or Senior Leaders Team is to provide a superior environment to ensure that teachers can teach, and students can learn effectively. Studies show that instructional leadership factors contribute positively to teacher-teaching quality. The study also found that the Senior Leaders Team practiced all instructional leadership functions and there was a significant relationship between teacher teaching competence, teacher self-efficacy, and academic achievement (Yusri & Aziz, 2013; Yusri, 2012). Instructional leadership is a predictor variable for teacher-teaching competence. The results of Yusri's (2012) study also found that the instructional leadership of school leaders has a positive relationship and is a significant predictor of teachers' self-efficacy, teaching efficacy, teaching competence, and achievement measured through students' academic performance.

In other words, instructional leadership is related to the construction of a school climate where instructional leadership develops and arises spontaneously from the teachers themselves (Hoy & Miskel, 2005). To do that, principals must deliver a clear vision of the glory of teaching and continuous and consistent professional development that aims to improve learning in teaching.

3. Research Methods

This study is quantitative research, and the collection of information is from 392 teachers who are teaching in the 21st Century Education Pilot Primary Schools in Peninsular

Malaysia only. A questionnaire was used to study the instructional leadership practice of the Senior Leaders Team and the level of implementation of 21st Century Education and the level of implementation of 21st Century Education.

The study population consists of 392 primary school teachers who are teaching in the 21st Century Education Pilot Primary Schools in Malaysia. This study used stratified random sampling method where this method can reduce sampling error. In this study, randomly selected respondents have met the criteria of only full time and confirmed in service teacher, trained teachers and in-service teachers have served for at least one year. This is to ensure that respondents know the instructional leadership practices of the Senior Leaders Team and the level of implementation of the 21st Century in the school.

The type of measurement used is a Likert Scale. Part B of the questionnaire used in this study is a modified questionnaire from the Principal Instructional Management Rating Scale used to measure teachers' perceptions of the instructional leadership practices of the Senior Leaders Team. Part C of the questionnaire used in this study is a modified questionnaire form from the questionnaire used by the Johor State Department of Education produced by School Improvement Partners Plus (SIP+) in the state of Johor to measure teachers' perceptions of Head Teacher Planning and Implementation towards 21st Century Education in schools in Johor.

This research instrument is in the form of a questionnaire because it is compatible with the survey research method. The researcher had distributed the questionnaire to all the primary school teachers by hand. All quantitative data were obtained, processed, and analyzed using the software "Statistical Package for the Social Science" (SPSS 20.0). Quantitative data analysis was done by dividing it into three parts, namely Part A: The background of the respondents, Part B: The practice of the Senior Leaders Team as teaching leaders in schools, and Part C: The teacher's view of the Senior Leaders Team as implementers of 21st century education in schools. Through the analysis, the researcher obtained results in frequency, percentage, and mean. The researcher denotes that there is a significant relationship between instructional leadership practices with implementation of 21st Century Education using Pearson Correlation for measuring research objective 3.

4. Results

The results of data analysis found that the overall mean for the Instructional leadership Practice of the Senior Leaders Team for the aspect of Defining the School Mission is 4.48 with a standard deviation of 0.48 which is at a high level. Based on the views of these teachers, it shows that most of the Senior Leaders Team the Pilot Schools know, understand, and appreciate the mission of the school in their respective schools.

The results of data analysis found that the overall mean for the practice of Instructional leadership in the aspect of Managing Instructional Programs is 4.35 with a standard deviation of 0.40 which is at a high level. This shows that the Senior Leaders Team at the Pilot Schools in Malaysia has implemented the guidance of the instructional program very well.

The results of data analysis found that the overall mean for Instructional leadership Practice for the aspect of Creating a Positive Learning Climate is 4.38 with a standard deviation of 0.45 which is at a high level. This shows that all Senior Leaders Teams in 21st Century Education Pilot Schools attach great importance to the excellence of their

students through programs to improve the mental, physical and spiritual quality of students as well as the cheerfulness and safety of the school with a positive learning climate in the school.

Overall, the results of data analysis found that the overall mean for the practice of Senior Leaders Team as Instructional Mentors in the 21st Century Education Pilot Schools in Malaysia is 4.41 with a standard deviation of 0.39 which is at a high level. This shows that the Senior Leaders team at the Pilot Schools in Malaysia adopts an instructional leadership style in their respective schools to enhance the excellence of their schools. The results of data analysis found that the overall mean for the level of Leadership Management Aspects in schools is 4.44 with a standard deviation of 0.47 which is at a high level. Item 2 showed the highest mean score of respondents compared to other items, which is 4.57 with a standard deviation of 0.56, it was found that teachers are of the view that the knowledge of their Senior Leaders Team is very good in knowing the ranking position of their respective schools.

The results of data analysis found that the overall mean for the level of aspects of Improving the Quality of Teaching and Learning in schools is 4.45 with a standard deviation of 0.44 which is at a high level. The results of data analysis found that the overall mean for the level of Stakeholder Involvement is 4.40 with a standard deviation of 0.47 which is at a high level. Item 1 shows the highest mean score of respondents compared to other items, which is 4.54 with a standard deviation of 0.55, teachers think that the Senior Leaders Team has implemented activities to promote 21st Century Education Management.

Overall, based on [Table 1](#), the results of data analysis found that the overall mean for the level of Implementation of the Senior Leaders Team for 21st Century Education in Pilot Schools is 4.43 with a standard deviation of 0.43 which is at a high level. The Teaching and Learning Quality Improvement dimension showed the highest mean score of the respondents with a mean value of 4.45 and a standard deviation of 0.44 indicating that the teachers considered the Senior Leaders team to have implemented the Teaching and Learning Quality Improvement well in the Pilot schools The Leadership Management dimension showed the second highest mean score of respondents with a mean value of 4.44 and a standard deviation of 0.47 indicating that teachers considered their Senior Leaders team to have planned and implemented 21st Century Leadership Management very well.

Table 1: Analysis of Implementation by 21st Century Education Mean and Standard Deviation

Dimension	(M)	Standard Deviation (Sp)	Level
Leadership Management	4.44	0.468	High
Improving the Quality of Teaching and Learning	4.45	0.443	High
Stakeholder Involvement	4.40	0.469	High
21 st Century Education	4.43	0.430	High

The next question addressed in this study is to identify the relationship between the elements of Instructional Leadership with the level of implementation of 21st Century Learning in the Malaysia District Pilot Schools. It aimed to test the relationship between the independent variable (Instructional leadership) with the dependent variable (21st

Century Education), the researchers conducted a Pearson correlation test (*two-tailed*). The schedule below shows the results of statistical tests that have been performed.

In particular, with reference to [Table 2](#), the two aspects of Defining School Mission and Leadership Management are Moderately strong with a coefficient of 0.600 and significant at the 0.01 level. Correlation analysis found that the practice dimension of Defining a School Mission in Instructional Leadership is positively and significantly related to the implementation of Leadership Management in 21st Century Education. This shows that the higher the practice of Defining a School Mission in Instructional Leadership of 21st Century Learning in Malaysia Pilot Schools.

Table 2: Pearson Correlation Analysis Between Instructional Leadership Elements and 21st-Century Education

Pearson Correlation	Defining the Mission of the School	Managing Instructional Programs	Creating a Positive Learning Climate	Leadership Practices Principals
Leadership Management	0.600	0.679	0.690	0.725
Improving the Quality of Teaching and Learning	0.625	0.714	0.769	0.777
Stakeholder Involvement	0.453	0.636	0.640	0.637
21 st Century Education	0.596	0.721	0.746	0.760

Through the study, it can be concluded that the instructional leadership practice of the Senior Leaders Team in the 21st Century Pilot Schools in Malaysia is at a high level, especially from the aspect of Defining the School Mission, followed by the aspect of Creating a Positive Learning Climate and the aspect of Managing Teaching Programs. This can be seen from the instructional leadership practices of headmasters in 21st Century Learning Pilot Schools which showed a high level by recording a mean score of 4.41 (SP = 0.39).

The second highest level, a mean score of 4.39 (SP = 0.45), coincides with the opinion of **Alimuddin (2010) explained** that an instructional leader who is an agent of change and creates a conducive school environment significantly impacts student excellence. The leadership of Headmasters in Pahang adopts an effective learning climate by always taking into account the school climate and allocating time to manage the school to excel in line with the results of the study of monitoring and observation. The School Environment was at the highest level with a mean score of 4.54 (SP = 0.55) and the aspect of Making Supervision and Observation in the Classroom which is also at a high level and recorded a mean score of 4.48 (SP = 0.58). In addition, the practice of instructional leadership aspects of Implementing the Program "Protecting Teaching Time" MMI in schools which also recorded a high-level mean score of 4.41 (SP = 0.62) cleats the findings of the study.

Furthermore, the findings of the study of Instructional Leadership practice of the Senior Leaders Team of the 21st Century Learning Pilot Schools dimension of Managing Teaching Programs is the third highest level with a mean score of 4.36 (SP = 0.41). These findings align with the study of [Hallinger \(2000\)](#) and [Abdul, Aziah and Tan \(2008\)](#), which showed that instructional leadership factors contribute positively to the quality of teachers' teaching. In addition, the study of [Yusri and Aziz \(2013\)](#) also found that the Senior Leaders

Team practiced all the functions of instructional leadership and there was a significant relationship between teachers' teaching competencies, teachers' self-efficacy, and students' academic achievement. It is clear based on opinion when [Hussein \(1993\)](#) said that instructional leadership is an effort taken by school leaders to provide curriculum innovation and to develop the learning process in teaching to achieve school goals.

The findings of the analysis of the study found that the level of implementation of 21st Century Education Senior Leaders Team in 21st Century Learning Pilot Schools in Malaysia is at a high level with a mean score of 4.43 (SP = 0.43). Dynamic and persistent Headmaster leadership is a variable to school success as well as implementing change in line with current challenges for 21st Century educational preparation.

While the level for the dimension of Teaching and Learning Quality Improvement is at the highest level with a mean score of 4.45 (SP = 0.44), followed by the level of planning and implementation of the Leadership Management dimension which is at the second highest level with a mean score of 4.44 (SP = 0.47). While the level Stakeholder Involvement dimension is at the third highest level with a mean score value of 4.40 (SP = 0.47). Based on the dimensions of 21st Century Education planning and implementation of the senior leaders The team at PAK21 Pilot Schools in Malaysia for the dimension of Improving the Quality of Teaching and Learning found that the aspect of Teaching and Learning Media is sufficient (Electronic / Non-Electronic Media) is at a high level with a mean score of 4.32 (SP = 0.70) in line with the findings of Kementerian Pendidikan (2013) that it is time for teachers in our country to become serious computer users and will be directly involved in large-scale changes to support 21st century learning in daily routines them.

Based on the dimension of Improving the Quality of Teaching and Learning found that the aspects of Informing About the Concept of PLC Implementation, 21st Century Learning, and monitoring Teaching and Learning quality to all school children are at a high level with a mean score of 4.50 (SP = 0.58) in line with the findings of [Aziz et al. \(2019\)](#), based on his research has shown that there are several 21st Century learning styles among students as implication from the implementation by the teachers and school leadership that directly influence the objective of the research study. Indirectly, this supports the view of [\(Kementerian Pendidikan Malaysia, 2013\)](#) PPPM 2013-2025 stated that the transformation of education aims to equip every student in the country with all the new skills needed by them to seize the opportunities and challenges of the 21st century.

In the level of implementation of 21st Century education of Senior Leaders Team in 21st Century Education Pilot Schools for Leadership Management dimension, the aspect of Knowing the Position/ Ranking of the school is at a high level with a mean score of 4.57 (SP = 0.56), the aspect of Having a slogan/ motto/ tag-line schools are at a high level with a mean score of 4.55 (SP = 0.58) and aspects of Determining GPS / Composite Score / Band Schools are at a high level with a mean score of 4.52 (SP = 0.57). This finding is in line with the results of [Kementerian Pendidikan Malaysia \(2013\)](#) study that school leadership needs to have leadership characteristics that can set goals, direct and coordinate and administrative to achieve the target.

Finally, the findings of the study analysis as in [Table 3](#) found that the level of implementation of 21st Century education of the Middle Leaders Group in 21st Century Education Pilot Schools in Malaysia District for the Stakeholder Involvement dimension is at a high level with a mean score of 4.40 (SP = 0.47). The Aspect of the School Having Implemented Activities to Promote the Management of 21st Century Education

Management is the highest aspect with a mean score of 4.54 (SP = 0.55). While the second highest aspect is that the school has adopted the 21st Century Management Approach and Practice in Implementing School Facilities, which is a mean score of 4.51 (SP = 0.53). Aspects of the School Having Taken the Initiative, Space, and Opportunity of the existing School Coordination Committee / Community Brigade to implement the 21st Century Education Management Approach is at a high level with a mean score of 4.48 (SP = 0.52).

Table 3: Analysis of Implementation by 21st Century Education Mean and Standard Deviation

Dimension	(M)	Standard Deviation (Sp)	Level
Leadership Management	4.44	0.468	High
Improving the Quality of Teaching and Learning	4.45	0.443	High
Stakeholder Involvement	4.40	0.469	High
21 st Century Education	4.431	0.430	High

The results of the study found that the level of instructional leadership practice of the Senior Leaders Team is at a high level, while the level of implementation of 21st Century education in the 21st Century Education Pilot Schools in Malaysia is also at a high level. Correlation analysis in [Table 2](#) found a positive and significant relationship between the instructional leadership practices of the Senior Leaders Team and the level of implementation of 21st Century Education in the Pilot Schools in Malaysia. Both are strongly correlated with a coefficient of 0.760 which is greater than 0.5. This indicates that the higher the practice of instructional leadership, the higher the implementation of 21st Century Education in Pilot schools in Malaysia. Finally, it is hoped that this research will be able to provide information and a clear picture of the level of instructional leadership practice and the level of implementation of 21st Century education in the 21st Century Education Pilot Schools in Malaysia. The high level of implementation indicates the implementation is a success in the PRIMARY schools in Malaysia have already embraced 21st Century Education from the Senior Leaders team, teachers, students, and parents.

The next question is to identify the relationship between the elements of Instructional Leadership with the level of implementation of 21st Century Learning in the Malaysia Pilot Schools. It aimed to the relationship between the independent variable (Instructional leadership) with the dependent variable (21st Century Education) the researchers made a Pearson correlation test (*two-tailed*). [Table 4](#) shows the results of statistical tests that have been performed.

In particular, the two aspects of Defining School Mission and Leadership Management are moderately strong with a coefficient of 0.600 and significant at the 0.01 level. Correlation analysis found that the practice dimension of Defining School Mission in Instructional Leadership is positively and significantly related to the implementation of Leadership Management in 21st Century Education. This shows that the higher the practice of Defining School Mission in Instructional Leadership at 21st Century Learning Pilot Schools in Malaysia.

Table 4: Pearson Correlation Analysis Between Instructional Leadership Elements and 21stCentury Learning

Pearson Correlation	Defining the Mission of the School	Managing Instructional Programs	Creating a Positive Learning Climate	Leadership Practices Principals
Leadership Management	0.600	0.679	0.690	0.725
Improving the Quality of Teaching and Learning	0.625	0.714	0.769	0.777
Stakeholder Involvement	0.636	0.640	0.721	
Education	0.637		0.453	0.760

5. Discussion

Through the study, it can be concluded that the instructional leadership practice of the Senior Leaders Team in the 21st Century Learning Pilot Schools in Malaysia is at a high level, especially from the aspect of Defining the School Mission, followed by the aspect of Creating a Positive Learning Climate and the aspect of Managing Teaching Programs. This can be seen from the instructional leadership practices of headmasters in the 21st Century Learning. The second highest level, a mean score of 4.39 (SP = 0.45), coincides with the opinion of [Alimuddin \(2010\)](#) explained an instructional leader who is an agent of change and creates a conducive school environment has a significant impact on student excellence.

Findings of [Jamelaa and Jainabee \(2011\)](#) stated that the instructional leadership of Headmasters in Pahang adopts an effective learning climate by always taking into account the school climate and allocating time to manage the school to excel in line with the results of this study. The School Environment is at the highest level with a mean score of 4.54 (SP = 0.55) and the aspect of Making Supervision and Observation in the Classroom is also at a high level which recorded a mean score of 4.48 (SP = 0.58). In addition, the practice of instructional leadership aspects of Implementing the Program "Protecting Teaching Time" MMI in schools which also recorded a high mean score of 4.41 (SP = 0.62) supports the study findings.

The finding for the Managing Teaching Programs dimension is the third highest level with a mean score of 4.36 (SP = 0.41). This finding aligns with the study of [Hallinger \(2000\)](#) and [Abdul, Aziah and Tan \(2008\)](#) which showed that instructional leadership factors contribute positively to the about the quality of teaching OR teachers' acceptance and implementation of 21st Century Learning in classroom in school. In addition, the study of [Yusri and Aziz \(2013\)](#) also found that the Senior Leaders Team practiced all the functions of instructional leadership and there was a significant relationship between teachers' teaching competencies, teachers' self-efficacy, and students' academic achievement. Instructional leadership is an effort taken by school leaders to provide curriculum innovation and develop the learning process in teaching to achieve school goals ([Hussein, 2008](#); [Hussein, 1993](#)). From the teachers' responses it shows the success of implementation by the school leaders as school leaders set the school goals and teachers

are working towards achieving those goals. It shows the high successful rates of 21st Century Learning implementation through the leaders.

The findings of the analysis of the study found that the level of implementation of 21st Century education Senior Leaders Team in 21st Century Learning Pilot Schools in Malaysia is at a high level with a mean score of 4.43 (SP = 0.43). This finding is in line with the results of a study by [Hussein \(1993\)](#) stating that what differentiates school effectiveness is the leadership of the Headmaster. Dynamic and persistent Headmaster leadership is a variable to school success as well as implementing change in line with current challenges for 21st Century educational preparation.

While the level for the dimension of Teaching and Learning Quality Improvement is at the highest level with a mean score of 4.45 (SP = 0.44), followed by the level of planning and implementation of the Leadership Management dimension which is at the second highest level with a mean score of 4.44 (SP = 0.47). While the level Stakeholder Involvement dimension is at the third highest level with a mean score value of 4.40 (SP = 0.47). The finding of high level of teaching and learning quality improvement, planning and implementation of the Leadership Management dimension and involvement of stakeholder. [Aziz et al. \(2019\)](#) stated that an agenda in education programs now as preparation for the 21st century is to create a transformation in the education system that includes aspects of the curriculum, assessment system, administration, and learning management.

Based on the dimension of Improving the Quality of Teaching and Learning found that the aspects of Informing About the Concept of Professional Learning Community Implementation, 21st Century Learning, and monitoring teaching and learning quality to all school children are at a high level with a mean score of 4.50 (SP = 0.58) in line with the findings of [Abdul Rahim \(1999\)](#), based on his research has shown that there are several 21st Century learning styles among students.

While in the level of implementation of 21st Century education of Senior Leaders Team in 21st Century Learning Pilot Schools for Leadership Management dimension, the aspect of Knowing the Position/ Ranking of the school is at a high level with a mean score of 4.57 (SP = 0.56), the aspect of Having a slogan/ motto/ tag-line schools are at a high level with a mean score of 4.55 (SP = 0.58) and aspects of Determining GPS / Composite Score / Band Schools are at a high level with a mean score of 4.52 (SP = 0.57). This finding is in line with the results of [Razali \(1989\)](#) study that school leadership needs to have leadership characteristics that can set goals, direct and coordinate, and administer to achieve the targets.

Finally, the findings of the study analysis found that the level of implementation of 21st Century education of the Senior Leaders Team in 21st Century Learning. Pilot Schools in Malaysia for the Stakeholder Involvement dimension is at a high level with a mean score of 4.40 (SP = 0.47). The Senior Leaders in schools implemented activities to promote the Management of 21st Century Education Management is the highest aspect with a mean score of 4.54 (SP = 0.55). While the second highest aspect is that the school has adopted the 21st Century Management approach and practice in implementing school facilities, which is a mean score of 4.51 (SP = 0.53). Aspects of the School Having Taken the Initiative, Space, and Opportunity of the existing School Coordination Committee / Community Brigade to implement the 21st Century Education Management Approach is at a high level with a mean score of 4.48 (SP = 0.52).

6. Conclusion

The level of instructional leadership practice of the Senior Leaders Team is at a high level, while the level of implementation of 21st Century education in the 21st Century Education Pilot Schools in Malaysia district is also at a high level. Correlation analysis found a positive and significant relationship between the instructional leadership practices of the Senior Leaders Team and the level of implementation of 21st Century Education in the Pilot Schools in Malaysia which indicates the effectiveness of the instructional instructions by the senior leaders team to convey the importance and the changes required in education parallel to the 21st century learning to the teachers who received and accepted the need for changes and innovation not as challenge but a necessity to provide a quality education for the students.

Correlation analysis found a positive and significant relationship between the instructional leadership practices of the Senior Leaders Team and the level of implementation of 21st Century Education in the Pilot Schools in Malaysia which indicates the effectiveness of the instructional instructions by the senior leaders team to convey the importance and the changes required in education parallel to the 21st century learning to the teachers who received and accepted the need for changes and innovation not as challenge but a necessity to provide a quality education for the students.

Ethics Approval and Consent to Participate

The researchers used the research ethics provided by the Research Ethics Committee of University Technology Malaysia (UTM). All procedures performed in this study involving human participants were conducted in accordance with the ethical standards of the institutional research committee. Informed consent was obtained from all participants according to the Declaration of Helsinki.

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Conflict of Interest

The authors declare no conflict of Interest.

References

Abdul Rahim, A. R. (1999). *Kemahiran berfikir merentasi kurikulum: pendekatan pedagogi dan wawasan pendidikan bestari*. Penerbit Fajar Bakti.

- Abdul, G. A. & Tang K. N. (2006). Motivasi guru dan pengurusan budaya kolaboratif pengurusan pendidikan Wanita. *Jurnal Pendidikan*, 31, 97-105.
- Alimuddin, M. D. (2010). *Ciri-Ciri Pengetua yang "Outstanding"*. Pendidik Widad Publications.
- Aziz, N. A., Seman, S. A., Hashim, M. J., Roslin, R. M., & Ishar, N. I. (2019). Millennial Learners' Acceptance and Satisfaction of Blended Learning Environment. *Asian Journal of University Education*, 15(3), 129.
- Clark, I. (2009). *An analysis of the relationship between K-5 elementary school teachers' perceptions of principal instructional leadership and their science teaching efficacy*. Thesis of Ph.D., University of Minnesota.
- Drake, T. L., & Roe, W. H. (2002). *The principalship* (6th ed.). New York: Pearson.
- Hallinger, P. (2000). A review of two decades of research on the principalship using the Principal Instructional Management Rating Scale. In Paper presented at the *American Educational Research Association annual meeting, Seattle, Washington*.
- Hallinger, P. (2011a). Leadership for learning: lessons from 40 years of empirical research. *Journal of Education Administration*, 49(2), 125 -142.
- Hallinger, P. (2011b). A review of three decades of doctoral studies using the Principal Instructional Management Rating Scale: A lens on methodological progress in educational leadership. *Educational Administration Quarterly*, 47(2), 271–306.
- Hallinger, P., & Heck, R. H. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research, 1980-1995. *Educational Administration Quarterly*, 32(1), 5–44.
- Hallinger, P., & Heck, R. H. (1998). Exploring the principal's contribution to school effectiveness. *School Effectiveness and School Improvement*, 9(2), 157–191.
- Hallinger, P., & Murphy, J. F. (1987). Assessing and developing principal instructional leadership. *Educational Leadership*, 9, 54–61.
- Hoy, W. K., & Miskel, C.G. (2005). *Educational administration: Theory, research, and practice*. (7th Ed). New York/McGraw-Hill.
- Hussein, M. (1993). *Effective School Leadership*. Kuala Lumpur. Dewan Bahasa dan Pustaka.
- Hussein, M. (2008). *School Leadership and Effectiveness*. Second Edition. Kuala Lumpur/ Dewan Bahasa dan Pustaka.
- Jackson, A. W., Davis, G. A., Abeel, M., & Bordonaro, A. (2000). *Turning points 2000: Educating adolescents in the 21st century* (1st ed.). New York & Westerville: Teachers College Press.
- Jamelaa, B. A. & Jainabee, M.K. (2011). Instructional Leadership and Attitude towards Organizational Change among Secondary Schools Principals in Pahang, Malaysia. *Procedia-Sosial and Behavioral Sciences*, 15, 3304-3309.
- James, A. J. E., & Balasandran, R. (2013). *Kepimpinan instruksional: Satu panduan praktikal* (2nd ed.). Kuala Lumpur/PTS Akademia.
- Kementerian Pendidikan Malaysia. (2007). *Memperkasakan kepimpinan instruksional di sekolah* (1sted.). Kuala Lumpur/Bahagian Sekolah, Kementerian Pendidikan Malaysia.
- Kementerian Pendidikan Malaysia. (2012). Laporan Awal Pelan Pembangunan Pendidikan Malaysia 2013-2025. Kuala Lumpur.
- Kementerian Pendidikan Malaysia. (2013). Pelan Pembangunan Pendidikan Malaysia 2013-2025. <https://www.moe.gov.my/dasarmenu/pelan-pembangunan-pendidikan-2013-2025>
- Kis, A., & Konan, N. (2014). A Meta-analysis of gender differences in terms of teacher views on the instructional leadership behavior of principals. *Educational Sciences: Theory & Practice*, 14(6), 2139–2145.

- Krug, S. E. (1992). Instructional leadership: A constructivist perspective. *Educational Administration Quarterly*, 18(3), 210 – 225.
- Leithwood, K., & Jantzi, D. (2000). Principal and teacher leadership effects: A replication. *School Leadership & Management*, 20(4), 415–434.
- Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Performance Management and Delivery Unit (PEMANDU). (2010). Government transformation program. Malaysia.
- Razali, M. Z. (1989). *Kepimpinan Dalam Pengurusan*. Kuala Lumpur/Utusan Publication and Distributors Sdn. Bhd.
- Robinson, V. M. J., Lloyd, C. A., & Rowe, K. J. (2008). The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types. *Educational Administration Quarterly*, 44, 635-674.
<http://dx.doi.org/10.1177/0013161X08321509>
- Yusri, M. I. (2012). *Model Kepimpinan instruksional Pengetua Efikasi dan Kompetensi Pengajaran*. Universiti Malaysia Terengganu.
- Yusri, M. I., & Aziz, A. (2013). Model Kepimpinan Maya dan Kesejahteraan Kerja Pemimpin Sekolah Malaysia: Perantaraan oleh Komunikasi Dalam Kumpulan. *Jurnal Kepimpinan Pendidikan*, 2(1), 1-10.