Principals' Transformational Leadership Practices and their Relationship with Teacher Blended Teaching in Rural Schools

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Abstract
The increasingly challenging world of education requires educational leaders to re-evaluate their leadership approaches to improve teacher teaching, especially in rural areas. This study aims to identify the level of transformational leadership practices of principals and its relationship with teachers' blended teaching in secondary schools. Blended teaching, although effective, is still at a low level in rural schools. This study used an online questionnaire with a quantitative approach involving 132 respondents from 210 teachers. The findings show that the level of transformational leadership of principals is very high (mean=4.30, SD=0.10) and the level of teacher commitment is high (mean=4.13, SD=0.07. The analysis found a significant relationship between transformational leadership practices of principals and blended learning teachers in SMK Pensiangan district, Sabah (r=0.516, p<0.01). This study provides new insights into educational management, especially blended learning that requires the use of technology. The implications of the study suggest effective programs, leadership training, and well-planned educational policies and guidelines to empower blended learning. For future studies, a qualitative approach with a larger sample is recommended to obtain a more comprehensive picture of the relationship between transformational leadership and the effectiveness of blended learning.
Keywords: Principals Transformational, Leadership Practices, Relationship, Teacher Blended, Rural Schools

Introductions
Burns defines a transformational leader as someone leader striving to develop the potential of followers and motivates them to achieve extraordinary results (Saffardin and Mydin 2023). The view of this foreign scholar shows that the ability of individuals to develop the potential of followers and inspire them to achieve excellent performance in the organization. In the context of education, Sholeh's (2021) study transformational leadership is a platform to improve teacher competence and have a positive impact on teaching in secondary schools. This in turn improves the quality of teaching and has a positive impact on students' academic achievement.

Blended learning refers to the colloboration with traditional teaching methods and the use of digital technologies to improve interaction, learning quality, and technology acceptance (European Commission 2020). Based on European Commission (2020), technologies such as WhatsApp applications can improving teacher-student communication and teaching quality. During the COVID-19 pandemic, blended learning has become a major focus, providing flexible solutions with the integration of online and face-to-face learning (ElSayad, 2023; Amenduni and Ligorio, 2022). This approach will providing the digital interactive tools and personalized learning platforms that strengthen teachers' professional relationships (Abuhassira et al., 2024). In Malaysia, blended learning introduced by the Ministry of Education integrates technology components to improve STEM education and English language proficiency (MoE, 2021).

The Malaysian Education Development Plan (PPPM) 2013-2025 higlight the best performance leadership and the use of ICT to improve the quality of education (Kamaluddin, Husnin 2022). The High Performance Leadership Policy prioritizes school leaders who inspire through transformational leadership (Sivakumar, Awang, Othman, 2024), while the TMK/ICT and Digital Education Policy (DPD) supports the use of technology to face 4IR challenges and improve learning and education management. The principal's transformational leadership and teachers' blended teaching need to be empowered to ensure access to quality education, in line with the aspirations of the education system and the National 4IR Policy (2021).

Principal transformational leadership is important for motivating and improving teacher effectiveness, but its implementation in Malaysia remains inconsistent (Johari et al. 2022). Although positively related to school climate and teacher commitment, this leadership is poorly practicing in blended learning. Blended learning collaborates the traditional and digital methods, has not been optimized, especially post-pandemic (Sanmugam, Hamid, Othman 2023). The factors of challenges are low teacher ICT skills, limited use of technology, and lack of digital infrastructure (Khairul, Syafiq, and Firdiana 2020).

The main purpose of this study for identifying the level of transformational leadership of principals and its relationship with blended teaching of secondary school teachers in the Pensiangan district, Sabah. Based on the purpose of study, there are three objectives was created. Identify the level of transformational leadership practices of principals in secondary schools in the Pensiangan district. ii. Identify the level of blended teaching in secondary schools in the Pensiangan district. ii. Study the relationship between transformational leadership of principals and teachers' blended teaching.

The contributions of this study is practically for educational administration by exploring how transformational leadership of principals can improve teachers' blended learning by providing the complete guidance to the MOE, NRD, and principals in the Pensiangan district on the education system in SMKs in the district and fills the research gap on the effectiveness of transformational leadership in strengthening blended learning.

Literature Review
Transformational leadership refers to a leadership style that involves leaders motivating and inspiring followers to achieve profound change, improve performance, and create a shared vision (Chin et al., 2024; Mohd Isa et al., 2023). This will highlight the role of organizational

performance, engagement, and employee satisfaction, while encouraging innovation, building strong relationships, and supporting personal and professional development (HeminiKrishnana, 2023). In the context of schools, transformational leadership is important to motivate and direct school staff in achieving educational goals

Transformational Leadership Theories and Models
The transformational leadership theory by Burns (1978) and Bass (1985) was developed by Bernard M. Bass, divided with four main elements, known as the 4 'Is'. This element is an important guide for transformational leaders to achieve efficient and effective achievements and results (Perumal, Abdul Wahab 2024).

Transformational Leadership Model
Based on Bass & Avolio's transformational leadership model (KartiniMohdYusoff et al., 2022), transformational leadership consists of four main dimensions: Ideal Influence, where leaders demonstrate confidence, charisma, and integrity to build organizational trust; Inspirational Motivation, which increases commitment and effectiveness through encouragement, appreciation, and collective issue-solving; Intellectual Stimulation, by encouraging innovation and creativity through questioning and problem-solving; and Individual Consideration, which pays attention to the needs and development of each member to increase job satisfaction and organizational effectiveness (Komala, 2023). Most of previous studies on transformational leadership have been conducted in Malaysia.

Teacher Blended Teaching
Blended teaching is systematically approach that involves interaction in the classroom as well as the use of technology to deliver lessons in the classroom. According to Yee and Suziyani (2021) the use of computers in schools began to be used in the early 1980s and has played a role as an important aspect of education for the young generation in the future. In order to preserve the mission of a quality and efficient education system, this requires the development of a sustainable technology system to produce creative and innovative thinking among educators. (Hong and Effendi, 2020).

The integration of learning presenting by face-to-face in the classroom needs to go hand-in-hand with online (non-face-to-face) learning called blended learning. The study of Roslin et al., (2024) has shown the implementation of teacher-blended teaching as an alternative that can help teachers to plan activities based on inquiry-based learning thus stimulating students' critical and creative thinking styles. Therefore, technological skills are a significant factor in implementing blended learning to coincide with the era of Industrial Revolution (IR) 4.0 which is based on four main elements namely creativity, reflectivity, responsibility and something that has an impact on the target group (Norraihan&Jamilah 2020).

Teacher Blended Teaching Model
Teaching by using blended learning model is defined as a method uses by integrating technology in direct learning will produce a blended learning approach when the intended mix is between face-to-face learning involving teachers and students and online learning using technology as the main medium to implement PdPc. Therefore, blended learning models combine face-to-face and online learning, with variations of models such as Rotation, Flex,

Self-Blend, and Enriched Virtual. These models aim to enrich the learning experience through the use of technology, a student-centered approach, and flexibility of PdP methods. Each model provides implementation options that suit the needs of students and learning objectives, in line with the needs of 21st century education (Horn and Staker 2024).

Dimension Teacher technology skills are the major factors in the implementation of blended learning models, especially for the online learning component. Therefore the teachers need to master the use of learning software, digital platforms, and multimedia tools to ensure the smooth and effective PdP process. Models such as Flex and Enriched Virtual rely heavily on teachers' technology skills to implement effective blended learning. Teachers who are proficient in using technology can increase the effectiveness of PdP delivery and provide more engaging learning experiences for students (Wang et al., 2021).

The pedagogical skills dimension of teachers is very important in ensuring a balance between face-to-face and online learning methods. As such example by using models such as Flipped Classroom require teachers to design the planning of learning activities that involve active interaction, collaboration, and self-exploration by students Azahari, Rahimi (2022). The teaching and learning are need to deliver with good pedagogical skills, teachers can adapt teaching strategies according to the needs of students in various learning modes, thus increasing the effectiveness of the PdP process (Mishra & Koehler, 2006).

The dimension of teacher innovation is an important foundation in implementing learning models such as Self-Blend and Enriched Virtual. In the study of Ara, Nursidah, Hidayat (2024), teachers are encouraged to try new approaches and create creative learning activities, such as the use of gamification or simulation, to attract students' interest and maximize the potential of technology. This innovation not only improves the quality of PdP but also provides creative solutions to learning challenges.

The dimension of self-efficacy, which is teachers' confidence in their abilities, is an important element in adapting blended learning models, especially the Rotation and Flex models. Teachers with high self-efficacy are more enthusiastic about trying new technologies and adopting innovative pedagogical approaches (Mukhtar. Anwar, Mahmud, Siregar 2024). This confidence increases teachers' resilience to challenges in implementing blended learning and ensures the continuity of quality teaching (Bandura, 1997; Tschannen-Moran & Hoy, 2001).

The relationship between Principals' Transformational Leadership Practices and Teacher's Blended Teaching The principal's Transformational leadership practices on Teacher's Blended
Teaching has been studied by past researchers and has a positive and significant relationship between the two variables. A study by Beruin and Nordin (2023) found that the level of transformational leadership of principals and teacher commitment in secondary schools is high. There is a significant relationship between these two variables. The study used an online questionnaire with a sample of 144 teachers from 225 residents. Descriptive analysis was used to determine the mean value, standard deviation, and percentage, while inferential analysis used the Pearson Correlation test to examine the relationship between variables. This

finding proves that the principal's transformational leadership is able to help teachers in teaching and is willing to help them in solving problems in the teaching process.

A study by Murad and Nor (2023) found that transformational leadership of principals in secondary schools in Serian District, Sarawak was at a high level. In the context of blended learning, strong transformational leadership brings positive impact on the quality of teachers' teaching. Principals who practice transformational leadership are able to inspire, support, and encourage teachers, as well as increase their motivation and commitment to teaching. By this way, teachers will be more likely to engage in more innovative and effective teaching practices, in line with the principles of blended learning that emphasize diversity and active participation in learning.

Previous studies found that transformational leadership of principals contributing on the teacher motivation, commitment, and self-efficacy. Blended learning become best choice for teachers and students, but requires a specific approach to improve effectiveness. Both of these factors have great potential to improve the quality of education in Malaysia. However, lacked study has examined the relationship between teachers' blended learning and transformational leadership practices of principals in Malaysia, which are more focused on teacher performance, motivation, and effectiveness (Hashim, N., Ismail, 2020). Therefore, further research is needed to fill this knowledge gap and improve the quality of national education.

Research Design
This study uses a survey design and a quantitative approach. According to Ramakrishnan, 2020), the most popular research strategy is survey research which allows researchers to collect quantitative data more quickly from a larger sample size.Population and sampling. The total population of respondents consisted of 210 teachers in three SMKs in the Pensiangan district. Based on the estimated sample size of Krejcie and Morgan (1970), which is appropriate for the size of the study population. 132 teachers were selected as the study sample by simple random sampling.

The researcher conducted the research in the form of a questionnaire because this study can cover a wide range of topics and is easy to structure. The questionnaire questions are divided into respondent demographics, transformational leadership and teacher blended teaching. Through the study by Kaushalya et al. (2020), the instrument of this section has been modified and adapted to the MLQ Form-5X-Rater scale according to the field of education. The question items have been adapted and modified from the study by Mohd Yassin, Mohd Nor, Alias (2023), namely the dimensions of principal transformational leadership are "ideal influence", "inspired motivation", "individual consideration" and "intellectual stimulation". While the dimensions of teacher blended teaching are "teacher technological skills", "teacher pedagogy", "teacher innovation" and "teacher self-efficacy". Items for information about respondent demographics are closed-ended and transformational leadership and teacher blended teaching items are in the form of a five-point Likert scale. The item choices for principal leadership practices and teachers' blended learning are "strongly agree" (5), "agree" (4), "somewhat disagree" (3), "disagree" (2), "strongly disagree" (1).

The content validity and face validity of the questionnaire in this study have been assessed and reviewed by field experts in educational administration to ensure that each item is clear and correct. Expert validity is to ensure that the questionnaire can measure the content area to enable accurate interpretation or inference based on the content (Sidi Ahmad, Abdul Wahab, 2021). A pilot study was conducted involving 30 teachers to fill out the questionnaire to test the reliability of the instrument. Cronbach's Alpha coefficient was used to test the reliability of the questionnaire. The results of the pilot study reported that the overall alpha value has reached a good and usable level of reliability, which is =0.865.

Data collection and measurement Quantitative data collected based on the questionnaire were analyzed descriptively and inferentially using SPSS version 29 software. Descriptive analysis is a method that can summarize and formulate data to make it easier to read and use (Taherdoos 2022). All the finding about standard deviation, percentage, frequency and mean value were all calculated using this approach. In this study, the interpretation of the mean score of the study is presented in table 1.

Table 1.1
Table 1 Interpretation of Mean Scores.

Score mean level	Interpretation
1.00 to 1.89	Very low
1.90 o 2.69	low
2.70 to 3.49	medium
3.50 to 4.29	high
4.30 to 5.00	Very high

Sources: Suganti Ealangov, Khairul Azhar Jamaludin (2023)
Inferential analysis used in this research as the method to explain about the population based on the results obtained from the Sukwika sample (2023). Inferential analysis is the Pearson correlation to determine the relationship between the two variables in order to test the study hypothesis. Interpretation of Pearson correlation based on Gan, Aida and Norasmah (2022).

Table 1. 2
Level of strength of correlation coefficient values

Size of Correlation Coefficient (r)	Strength of Correlation
0.91 to 1.00 or -0.91 to -1.00	Very strong
0.71 to 0.90 or -0.71 to -0.90	Strong
0.51 to 0.70 or -0.51 to -0.70	medium
0.31 to 0.50 or -0.51 to -0.50	weak
0.1 to 0.30 or -0.1 to -0.30	Very weak
.00	No correlations

Sources: Gan, Aida dan Norasmah (2022)

Finding

Respondent Demographic

Based on gender, 61 male teachers (46.2%) and 71 female teachers (53.8%) were used as respondents in this study. Based on age range, teachers under 30 years old were 49 (37.1%) and teachers aged 31 to 40 years were the highest, at 52 (39.4%). Teachers aged 41 to 50 years old were 21 (15.9%) while teachers aged 50 years and above were the lowest, at 10 (7.6%). Next, in terms of length of service, teachers who had served less than 5 years and below were the most numerous, at 59 (44.7%) and teachers who had served from 5 to 10 years were 30 (22.7%). Teachers who had served from 11 to 20 years were 27 (20.5%). Teachers who have served for 20 years or more are the lowest, at 16 people (12.1%).

Level of Transformational Leadership Practices of Principals

Based on the dataanalysis that have done shows that the transformational leadership practices of principals are at a very high level (mean=4.30, SD=0.10) as stated in table 5. All dimensions of transformational leadership of principals are recorded at very high and high levels. The dimension of "inspirational motivation" recorded the highest mean value (mean=4.39, SD=0.64) and the dimension of "intellectual stimulation" recorded the second highest mean (mean=4.35, SD=0.55). The dimension of "ideal influence" (mean=4.32, SD=0.22) and the dimension of "individual consideration" recorded the lowest level (mean=4.15, SD=0.55). This finding shows that under transformational leadership, principals tend to practice practices that provide inspirational motivation to teachers compared to other practices.

Table 1.3

Level of Transformational Leadership Practices of Principals

Dimensions of Transformational Leadership Practice	Mean score	Standards deviation (SP)	Interpretations
Ideal influence	4.32	0.22	Very high
Motivations inspiration	4.39	0.64	Very high
Consideration intellectual	4.15	0.67	High
Intellectual stimulation	4.35	0.55	Very high
Overall	**4.30**	**0.10**	**Very high**

Level of Teacher Blended Teaching

Based data analysis from the table 3 can be interpreted that teacher blended teaching is at a high level (mean=4.13, SP=0.07) as mentioned in Table 6. All dimensions of teacher blended teaching are at a high level. The dimension of "teacher self-efficacy" recorded the highest mean value (mean=4.22, SP=0.58) while the dimension of "teacher technological skills" recorded the lowest mean value (mean=4.04, SP=0.71). The dimension of "teacher pedagogical skills" (mean=4.14, SP=0.58) and followed by the dimension of "teacher innovation" (mean=4.13, SP=0.62).

Table 1.4
Teacher Blended Teaching Level

Dimensions of Teacher Blended Teaching	Means score	Standard deviations	Interpretations
Technology Skills Teacher Pedagogical	4.04	0.71	High
Teacher skills pedagogy	4.14	0.58	High
Teacher Innovation Dimensions	4.13	0.62	High
Teacher Self-Efficacy	4.22	0.58	High
Overall means	**4.13**	**0.07**	High

The Relationship between Principal Transformational Leadership and Teacher Blended Teaching

Pearson Correlation Analysis recorded r=0.516, p<0.01 which is displayed in table 7. Therefore, this analysis states that there is a moderate and significant positive relationship between Principal Transformational Leadership Practices and Teacher Blended Teaching. This is due to the significance value of less than 0.01. The findings of this study directly reject the hypothesis (Ho1) which is that this study directly proves that principal transformational leadership practices can have a moderate positive significant influence on teacher blended teaching.

Table 1.5
Relationship between Principal Transformational Leadership and Teacher Blended Teaching

		Transformational Leadership Practices of Principals	Blended Teaching by Teachers
Transformational Leadership Practices of Principals	Pearson Correlation	1	.516**
	Sig. (2-tailed)		<.001
	N	132	132
Blended Teaching by Teachers	Pearson Correlation	.516**	1
	Sig. (2-tailed)	<.001	
	N	132	132

**. Correlation is significant at the 0.01 level (2-tailed).

Level of Transformational Leadership Practices of Principals
The findings of this study found that the transformational leadership practices of principals overall were at a very high level according to teachers' perceptions. This finding showed that

principals in secondary schools in Pensiangan district, Sabah had successfully implemented all practices in the transformational leadership dimension, which divided into four main components: ideal influence, inspirational motivation, intellectual stimulation, and individual consideration. In particular, the inspirational motivation dimension showed the highest level of practice among principals. This dimension involves the ability of leaders to provide a clear vision, inspire enthusiasm, and encourage confidence and optimism among teachers. The highest average results in this dimension reflect the principal's ability to motivate teachers through effective communication, meaningful aspirations, and the ability to provide clear direction in achieving school goals.

The existence of strong inspirational motivation also helps to increase teachers' work morale and instill a sense of commitment to their duties and responsibilities. This finding is in line with the results of a study conducted by Yusoff, Ismail and Abdullah (2020) and a study by Muniandy and MohdNor (2024), which showed that the inspiration dimension in transformational leadership received a high mean score.

These studies prove that school leaders who implement inspirational leadership practices has successfully create a positive work environment and support teachers' professional development. Leaders who provide inspirational motivation are able to foster better relationships with school staff and encourage them to achieve excellent performance. However, this finding is different from a study conducted by King, Nor, and Alias (2023), who found that the level of transformational leadership among school leaders is generally low. However, the aspect of inspirational motivation still recorded the highest score compared to other transformational leadership dimensions. This shows that although school leaders lack other dimensions such as ideal influence, intellectual stimulation, and individual consideration, they still show strength in motivating and inspiring teachers.

Level of Blended Teaching of Teachers Based on the findings of the study, the blended teaching of secondary school teachers in the Pensiangan district is at a high level. Teacher self-efficacy is the highest factor in influencing teachers' blended teaching in the district. This finding includes three factors, namely technological skills, teachers have good ability in using educational tools and technology to support blended teaching. This can concludes that teachers in this district are able to integrate technology well in the classroom. In addition, teachers' strong pedagogical skills allow them to choose appropriate teaching strategies and approaches to meet the needs of students in blended teaching.

In addition, the dimension of teacher innovation, which is that teachers demonstrate high creativity and innovation in planning and implementing blended learning. This allows them to explore new and effective methods to improve student understanding.

The results of this study are similar with the finding from Yin and Hamzah (2023), which found that the level of teacher efficacy through teacher teaching is high. This proves that teachers with good levels of self-efficacy tend to provide more effective teaching, especially in the context of blended teaching that requires technology adaptation.The study by Batundok and Mansor (2023) also showed that teachers' teaching strategies were at a very high mean score level. However, this finding is different from the study by Alim and Rosli (2023), which found that the level of teacher efficacy was low in teacher teaching stimuli. This

is associated with the concerns faced by teachers, especially in implementing teaching that requires the use of technology. Factors such as lack of technological skills, limited resources, and lack of confidence can be the main causes of the low level of teacher efficacy in the study.

The Relationship between Principals' Transformational Leadership Practices and Teachers' Blended Teaching

This study found that there is a moderate and significant positive relationship between principals' transformational leadership practices and teachers' blended teaching. This positive relationship indicates that the higher the level of transformational leadership practiced by principals, the better the school environment is in supporting teachers to develop and implement blended teaching effectively. Based on the finding can concludesthat principals who demonstrate transformational leadership characteristics such as inspiring, fostering a spirit of innovation, and providing professional support can help teachers achieve higher levels of quality teaching in the context of blended teaching.

In blended learning, there are several critical elements that contribute to the effectiveness of implementation, including teacher technological skills, pedagogical skills, innovation, and teacher self-efficacy. Principals are able to provide themotivation and guidance can create a positive work environment, where teachers feel more confident in using technology, incorporating innovative teaching methods, and strengthening their pedagogical competence. This not only increases the level of teacher professionalism but also ensures that blended learning is implemented effectively to meet the needs of 21st century learning.

This finding is similar with Wong and Thien's (2020) study, which states that principals with strong transformational leadership are able to provide the encouragement, support, and direction that teachers need to improve their teaching approaches. School leaders who act as change agents help teachers adapt technology in their teaching, thus stimulating increased learning effectiveness among students.

In addition, MacLeod's (2020) study also supports this finding by emphasizing that principals' transformational leadership practices play an important role in developing teacher professionalism, especially in the context of technology-oriented teaching. Principals who possess transformational leadership traits such as inspiring, instilling a shared vision, and encouraging professional development have been proven to help teachers be more courageous in exploring new teaching methods, especially teaching that integrates technology. This can be intrepreted that principals' transformational leadership not only giving the positive impact on teachers' confidence in implementing blended teaching but also improves the quality of teaching that is more in line with current demands

In conclusion, transformational leadership effectively can improve blended teaching practices in schools. The dimension of "individual consideration" is important to provide guidance and training to teachers, while "teacher technology skills" need to be improved through the use of online learning platforms such as Google Classroom. Effective blended teaching will support the achievement of the National Education Policy and 21st century learning. This study shows that principals' transformational leadership has a positive and

significant relationship with teachers' blended teaching, which helps achieve the country's educational direction and aspirations.

Implications of the Study
The implications for the Malaysian Education system based on this study can be seen from five aspects, as such as to the policy, theory/model, Ministry of Education Malaysia (MOE), State Education Department and District Education Office as well as principals.

Implications to Teachers'
Readiness for educational policy changes can be strengthened through effective transformational leadership practices by principals. Principals need to ensure high-impact leadership, as outlined in the Malaysian Education Quality Standards Wave 2 (SKPMg2) (MOE, 2024), by focusing on support, guidance, and motivation for teachers. Teachers' blended learning also needs to be strengthened, in line with the standards set by the Quality Assurance and Inspection Board (QAIB), to ensure that the use of technology in teaching supports the achievement of national education policies. This combination helps ensure that policies formulated by the Ministry of Education Malaysia (MOE) can be implemented more effectively at the school level.

Theoretical/Model Implications
These findings emphasize the importance role on the transformational leadership theory and blended learning in strengthening the quality of education. Transformational leadership theory can help principals develop and utilize technology resources strategically to lead schools towards organizational effectiveness. In the context of blended learning, this approach encourages teachers to improve their technological proficiency, in line with the integration of technology in the overall PdPc process. Researchers can use transformational leadership theory and this blended learning approach as a basis for future studies to expand the effectiveness of educational models.

Implications for the State Education Department (JPN) and the District Education Office (PPD)
This study provides input to the State Education Department (JPN) and the District Education Office (PPD) that the dimensions of "individual consideration" in the transformational leadership practices of principals and "technology skills" in teachers' blended teaching show low mean scores. Therefore, the JPN and PPD can conduct further studies to identify strategies to improve the transformational leadership practices of principals and the mastery of technology in teachers' blended teaching. School visits can be implemented to identify real challenges and provide the necessary support. In addition, professional learning communities (PLCs) can be established to enable principals and teachers to share experiences, ideas, and best practices in integrating technology to implement effective blended teaching. Strategies and support structures formed based on these findings can help improve the quality of education at the school level.

Implications to Principals
 This study can help principals to identify and evaluate the strengths and weaknesses of transformational leadership practices. This study provides a positive impact to principals in the Pensiangan district to further improve the effectiveness of principals' transformational leadership, especially the inspirational motivational dimension by always inspiring teachers

with a high level of motivation. In addition, the findings of teachers' blended teaching practices are a meaningful reference base for principals about the actual situation of secondary school teachers in SMKs in the Pensiangan district. Principals need to play a role as transformational leaders to create an environment that practices blended teaching.

Suggestions for Further Research
This study only involves teachers in SMK Pensiangan district. Therefore, further research can be develop involve to a larger sample and population or expand to different locations in Malaysia. Therefore, the study findings will be comprehensive and comprehensive. This study only studies the relationship between the two variables. Therefore, further research can analyze the influence of demographic characteristics on transformational leadership of principals and teachers' blended learning. A comparative study can be conducted where the two variables are compared between two states or two different schools. This can identify the shortcomings faced by certain principals' leadership practices and immediately take improvement steps.

The future research can use qualitative approaches, such as interviews, observations, and school visits, can be combined with quantitative methods to gain a comprehensive picture of practices and challenges faced. These qualitative methods allow for more in-depth data collection and are not limited to standard responses, thus increasing the transparency and accuracy of research findings.

In addition, multiple regression analysis can be conducted to examine the relationship between transformational leadership dimensions, such as inspiration, motivation and individual consideration, with teachers' blended teaching dimensions, such as technology mastery and technology integration in PdPc. The findings of this study can provide detailed guidance to principals in applying transformational leadership practices that support the success of blended teaching in schools. This will be a clear direction to improve the quality of education hollistically.

Conclusion
Principal leadership brings big contributions as a role in teacher teaching and facilitation (PdPc), especially in promoting blended learning for ensuring that all teachers clearly understand the school's objectives, vision, and mission. As principal in school, also need to create a positive work environment to motivate teachers and ensure that the school operates smoothly as a whole. Therefore, the study not only focuses on transformational leadership practices of principals, but studies on other leadership styles are also given attention with an emphasis on the need to improve the organization and education system in Malaysia. Studies can also be conducted to find out the views of administrators consisting of principals, senior assistants, and heads of departments. Further studies require support from the State Education Department (JPN), District Education Office (PPD), principals, and teachers so that the study can be used as a reference in the future in the scope of education.

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