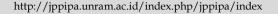


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# Leadership Contribution of Changing School Principals and School Climate Towards the Utilization of the Independent Teaching Platform

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**Abstract:** To improve the maximum use of the free learning platform by teachers, it is necessary to explore in more depth the problems that influence it, what factors influence it, and prevent the use of the free learning platform by teachers from being carried out as it should. Research aims to determine the correlation between the principal's change in leadership and the school climate in West Pasaman Regency State High School, the change in leadership of the school principal contributes to the use of the independent teaching platform, The school climate contributes to the use of the teacher's use of the freedom to teach platform, The principal's change leadership and the school climate contribute together to the use independent platform for teaching, This research uses a correlational quantitative method with an "ex-post facto" type of research, where ex-post facto research is an attempt to explore without manipulating conditions. Research results that show a direct and significant relationship between principals' change leadership and teachers' use of PMM can provide a basis for improving principals' change leadership. School principals can focus on strategies to improve their leadership in schools starting from identifying problems, planning changes, implementing changes, and cultivating changes for the better.

Keywords: Leadership; Platform; Teaching

## Introduction

Improving education is very important in developing national education government's efforts to reform national education are well reflected in the change in the 2013 Curriculum to the Independent Curriculum (Puad & Ashton, 2023). The current curriculum applies to all academic units, including early childhood education, elementary schools, middle schools, high schools, vocational schools, as well as special and equal education (Parker et al., 2022; Sanjaya et al., 2022). The Merdeka Curriculum, also known as Merdeka Belajar, aims to provide freedom for educational units, teachers, and students to innovate, be creative, and learn independently (Handayani et al., 2024; Survati et al., 2023).

The implementation of an independent curriculum is usually called a new learning paradigm. This ensures that learning practices are learner-centered. Through this new paradigm, learning is a cycle that begins with mapping competency standards, planning the learning process, and implementing assessments to improve learning so that students can achieve the expected competencies (Dwivedi et al., 2023). The independent learning policy is very different from the existing curriculum in formal education in Indonesia (Hakim & Nabila, 2022). This policy is believed to be a powerful strategy for the independent transformation of knowledge to prepare students and students for the future in line with their aspirations and career plans (Darling-Hammond et al., 2020). Teachers are the spearhead of curriculum implementation, because

whether or not the curriculum is implemented successfully in the learning process really depends on the teacher's understanding of the curriculum concept itself. For this reason, so that the curriculum can be implemented well, there must be socialization, training, technical guidance, and other activities for teachers.

The Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) developed Independent Teaching Platform (PMM) to support the implementation of the independent curriculum so that it can help teachers get references, inspiration, and strengthen understanding and sharpen' skills in implementing the independent curriculum in a spirit of collaboration and mutual support share (Amalia et al., 2023; Isatul Hasanah et al., 2023). The Merdeka Mengajar (PMM) platform provides opportunities for all teachers in Indonesia to continue learning and developing their competencies, whenever and wherever teachers are. The Learning feature on the Merdeka Mengajar Platform provides Independent Training facilities so that you can obtain quality training material by accessing it independently (Rohmah et al., 2024).

The features in the Platform Merdeka Mengajar (PMM) application are teacher development and teaching and learning activities (Novita et al., 2022). Selfdevelopment has several features, namely inspirational videos, independent training, proof of work, community. Teaching and learning activities consist of student assessments and teaching tools. It is hoped that the independent curriculum can be realized well through the use of the independent teaching platform, however, the use of the independent teaching platform has not been fully able to improve teacher performance. This can be seen from the initial observations that the author made at SMA Negeri 1 Pasaman through interviews with the principal and several teachers and is supported by data from the results of the 2023 education report cards at SMA Negeri 1 Pasaman Barat. It is known that teachers at West Pasaman State High School have not made maximum use of the independent teaching platform.

Based on initial observations, another phenomenon was also found, namely that several teachers said they did not utilize the independent teaching platform because of a lack of direction, guidance, and support from the school principal for teachers in facing changes in developing teacher competency in using the independent teaching platform. Apart from the influence of the principal's leadership, the school climate is also a factor in the lack of use of the independent teaching platform due to the lack of collaboration between fellow teachers in using PMM so that teachers who are less IT savvy have difficulty accessing the PMM application (Dian et al., 2021; Kristin Marjono & Heryjanto, 2023). There is a lack of appreciation from fellow teachers for teachers who have produced work on PMM (Soedjono, 2023; Didi Syahrir et al., 2023). By utilizing PMM, teachers are expected to be able to understand the independent curriculum and be able to play an active role in creating evidence of work uploaded to PMM.

Based on the background of the problem above, the researcher is interested in conducting research that aims to determine the correlation between the principal's change in leadership and the school climate in West Pasaman Regency State High School, the change in leadership of the school principal contributes to the use of the independent teaching platform by teachers at West Pasaman Regency State High School, The school climate contributes to the use of the teacher's use of the freedom to teach platform at West Pasaman Regency State High School, The principal's change leadership and the school climate contribute together to the use independent platform for teaching by teachers at SMA Negeri West Pasaman Regency, The principal's change in leadership contributed to the use of the independent teaching platform by teachers at West Pasaman Regency State High School.

## Method

This research uses a correlational quantitative method with an "ex-post facto" type of research, where ex-post facto research is an attempt to explore without manipulating conditions. This method is intended to investigate and analyze the factors suspected to be the cause of the incident. The preparation of this research instrument was carried out through several stages:



Figure 1. Preparation of this research instrument

## **Result and Discussion**

Data Description Analysis PMM Utilization Data Description

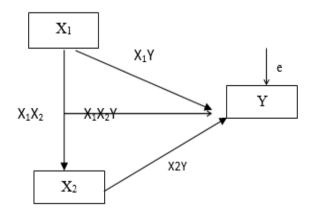
The PMM Utilization variable has 23 statement items in the form of a questionnaire with a minimum score of 23 and a maximum score of 115. From the research results based on questionnaires filled out by respondents, there was a lowest score of 58 and a highest score of 115.

Description of Leadership Variable Data: Principal Change

The principal change leadership variable has 31 statement items in the form of a questionnaire with a minimum score of 31 and a maximum score of 155. From the research results based on questionnaires filled out by respondents, there was a lowest score of 89 and a highest score of 153. The results of data processing obtained an average score (mean) of 130.28, mode of 129, median of 122, standard deviation of 13.86. The mean, mode and median scores are not much different and do not exceed the standard deviation, this means that the distribution of principal change leadership tends to be normal (Corrigan & Merry, 2022; Amzat et al., 2022).

## Description of School Climate Variable Data

The school climate variable has 27 statement items in the form of a questionnaire with a minimum score of 27 and a maximum score of 135. From the research results based on questionnaires filled out by respondents, there was a lowest score of 84 and a highest score of 132. The results of data processing obtained an average score of 84. 110.78, mode 107, median 104, standard deviation 10.14. The mean, mode and median scores are not much different and do not exceed the standard deviation, this means that the distribution of school climate tends to be normal.



**Figure 2.** Path Diagram Model Between Principal Change Leadership (X1), School Climate (x2), and PMM Utilization (Y)

Information:

X1X2 = Correlation between X1 and X2

X1Y = Partial contribution of X1 to Y

X2Y = Partial contribution of X2 to Y

X1X2Y= Simultaneous contribution of X1 and X2 to Y

e = Residual of path X1, X2 with Y

Tabel 1. Path Coefficient Between Variables

Track	Path Coefficient (□)	T	Sign
$\overline{X_1Y}$	0.46	5.83	0.002
$X_2Y$	0.36	4.91	0.002

Based on the results of data analysis and the level of achievement of the district high school teachers' responses. West Pasaman in general, the research results show that the variable utilization of the independent teaching platform (PMM) is at an achievement level of 82.96% with a "high" interpretation and the principal's change leadership is at an achievement level of 84.02% with a "good" interpretation, then for the school climate variable it is at an achievement level of 81.54 with the interpretation "conducive". The findings of this research are different from the results of initial observations made by researchers. Initial observations found that the use of the independent teaching platform in District Public High Schools (Rosenthal & Linder, 2021).

West Pasaman still looks not so good. The difference between research findings and initial observation findings occurs because the results of measurements carried out based on observations alone or without valid and reliable instruments are not strong enough to be used as a basis for generalization, so systematic research needs to be carried out in accordance with procedures, to obtain empirical evidence and truth (Olsson et al., 2022). The results of data analysis and hypothesis testing show that the four hypotheses tested in this research are acceptable. The results of data analysis show that the principal's changing leadership and school climate, either directly or indirectly, have a significant contribution or role in increasing the utilization of the independent teaching platform in District Public High Schools West Pasaman (Sattar et al., 2022). For greater clarity, below we will discuss the research findings in detail:

Correlation of Principal Change Leadership (X1) with School Climate (X2)

Based on the results of research on district high school teachers. In West Pasaman, it is known that the change in leadership of the principal and the school climate has a correlation of 0.338, which is considered quite strong. This means that the leadership change of the principal has a relationship with the school climate which will result in the use of PMM by district high school teachers West Pasaman.

Partial Contribution of Principal Change Leadership (X1) to PMM Utilization (Y)

From the research results it was found that the leadership variable of change in school principals contributed significantly to the utilization of the independent teaching platform (PMM) by %. This means that the leadership change of school principals can be used as a tool to predict the utilization of the independent teaching platform (PMM). In other words, PMM utilization can be determined by the change leadership of the school principal by 27.07%. The better the principal's change leadership, the better the teacher's use of PMM (Wicoksono et al., 2022).

Table 1, the principal change leadership variable (X2) shows a path coefficient value of 0.462, besides that it has a significance value = 0.002 < 0.05. This means that the principal change leadership variable has a positive and significant contribution to the use of PMM in District Public High Schools. West Pasaman, it can be concluded that Ho is rejected and Ha is accepted. Descriptive analysis shows the change in leadership of school principals in SMA Negeri Kab. West Pasaman is in the good category with an average score of 84.02% of the ideal score. This shows the change in leadership of the principal at SMA Negeri Kab. West Pasaman is quite good.

Looking at each indicator of the principal's change leadership, it appears that the highest indicator achievement level score (87.68% of the ideal score) is found in the idealism indicator. Furthermore, the score with the lowest level of achievement (77.99% of the ideal score) is found in the indicator of implementing change. In terms of implementing changes, the principal encourages teachers to continue learning and mobilizes all teachers and other teaching staff to utilize PMM to support PBM, one of which is by holding training related to the use of PMM, only in using the independent teaching platform (PMM) it needs to be equipped with facilities and infrastructure. support and how to use it (Tuminah & Gularso, 2023). However, supporting equipment is still lacking, such as computers and how to operate them.

Unstable electrical currents and signals are also obstacles for teachers. Apart from that, the obstacles faced by school principals in motivating teachers to utilize other independent teaching platforms (PMM) are the teachers themselves, such as the age factor which makes the teachers concerned slow and unfamiliar in understanding IT. The results of this research are also supported by research conducted by (Haleem et al., 2022; Kamalov et al., 2023; Nguyen et al., 2022) who said that one of the school climates is helping and encouraging teachers to understand the development and progress of technology so they can compete in the

digital era. The results of this descriptive analysis show that the leadership changes of the district high school principals. West Pasaman needs to be improved or improved in a better direction so that the category becomes good to very good.

This is because increasing the change leadership of school principals can also increase the use of the independent teaching platform (PMM) by teachers in accordance with the results of this research which states that the change leadership of school principals has a role in increasing the use of the free teaching platform (PMM) by teachers (Ansori et al., 2021; Wilson Heenan et al., 2023). Thus, it can be stated that the change leadership of the school principal also determines whether or not teachers use the free teaching platform (PMM), so it can be interpreted that increasing the use of the free teaching platform (PMM) by teachers can be done by increasing the school principal's change leadership (Hickey et al., 2023).

Partial Contribution of School Climate (X2) to PMM Utilization (Y)

From the research results, it was found that the school climate variable contributed significantly to the utilization of the independent teaching platform (PMM) by 19.20%. This means that school climate can be used as a tool to predict the use of the independent teaching platform (PMM). In other words, PMM utilization can be determined by school climate by 19.20%. The more conducive the school climate is, the better the use of PMM by teachers. Table 1 of the school climate variable (X2) shows a path coefficient value of 0.367, apart from that it has a significance value = 0.002 < 0.05. This means that the school climate variable has a positive and significant contribution to the use of PMM by teachers in SMA Negeri Kab. West Pasaman, it can be concluded that Ho is rejected and Ha is accepted. Descriptive analysis shows the school climate at SMA Negeri Kab. West Pasaman is in the conducive category with an average score of 81.54% of the ideal score. This shows the school climate at SMA Negeri Kab. West Pasaman is conducive.

Looking at each school climate indicator, it appears that the highest indicator achievement level score (85.55% of the ideal score) is found in the cooperation indicator. Furthermore, the score with the lowest level of achievement (76.76% of the ideal score) is found in the school physical environment indicators. Physical environmental indicators were at the lowest level in this study due to the environment at SMA Negeri Kab. West Pasaman still has a lot of rubbish scattered inside the classroom and outside the classroom. Apart from that, the gutters around the school are filled with rubbish due to the lack of rubbish bins provided by the school and

the absence of regulations regarding keeping the environment free of rubbish (Zhang et al., 2023; Molina & Catan, 2021). Toilets are inadequate in terms of building, number or cleanliness (Coswosk et al., 2019; Tumwebaze & Mosler, 2014).

Many of the school's ceilings and roofs were damaged. The school paint colors have faded. Furthermore, access to schools is also difficult because there are still many areas that have not been paved and when it floods the roads will become muddy (Munsaka & Mutasa, 2021). Apart from that, the uneven internet signal means that some schools are still lagging behind in using IT (Mudavanhu, 2014). This should be a special concern for school principals and other education managers, because a conducive physical school environment can increase teacher motivation in working so that it also has an impact on increasing the use of PMM by teachers in their work. Maria Sappa et al. (2023), Coman et al. (2020), Milyan (2022), said that complete facilities will encourage and motivate teachers in carrying out teaching and learning activities so that teachers are better able to improve their abilities in managing teaching and learning activities to make them more interesting and maximal and able to achieve the desired learning goals. One way for teachers to improve their ability to manage teaching and learning activities to make them more interesting and maximal is through the use of PMM.

The results of this descriptive analysis show that the school climate at SMA Negeri Kab. West Pasaman needs to be improved or improved in a better direction so that its category becomes very conducive. This is because improving the school climate can also increase the use of PMM by teachers in accordance with the results of this research which states that school climate has a role in increasing the use of PMM by teachers. Thus, it can be stated that the school climate also determines whether teachers use PMM well or not, so it can be interpreted that increasing the use of PMM by teachers can be done by improving the school climate (Dekawati et al., 2021; Syahril & Hadiyanto, 2018).

Simultaneous Contribution of Principal Change Leadership (X1) and School Climate to PMM Utilization (Y)

The results of this research data analysis show that the principal change leadership variable and the school climate variable together contribute to the PMM utilization variable. The magnitude of the contribution of the two variables together to PMM utilization is with a path coefficient value of x1x2y = 0.4627, and a determining contribution of 0.2025 (20.25%), while the remainder is contributed by other factors not examined in this research. In other words, the use of PMM can be determined by the change leadership of the principal and the school climate together directly and indirectly at

46.27%. The higher the leadership change of the school principal and the more conducive the school climate, the better the teacher's use of the independent teaching platform.

Furthermore, data analysis shows that the principal's change in leadership and school climate, both individually and jointly, significantly contribute to teachers' use of PMM. The principal's changing leadership and school climate are two very important factors because they can contribute to teachers' use of PMM media.

#### Conclusion

Based on the results of the analysis, it can be concluded as follows: The leadership change of the principal (X1) is correlated with the school climate (X2) seen from the Pearson correlation at 0.33, which means that the correlation between the two variables at SMA Negeri Kab. West Pasaman; The leadership change of the school principal contributed to the use of the independent teaching platform by teachers directly by 21.34% and indirectly by 5.73%. In general, the level of achievement of the principal's change leadership score is 84.02%, which is in the good category. This means that the better the principal's change leadership, the greater the teacher's use of the independent teaching platform; The school climate contributes to the use of the independent teaching platform by teachers directly by 13.47% and indirectly by 5.73%. In general, the school climate score achievement level is 81.54% in the conducive category. This means that the more conducive the school climate is, the more teachers will use the independent teaching platform; The change in leadership of the principal and the school climate together directly and indirectly contributed to the use of the independent teaching platform by teachers at 46.27%. This means that the better the leadership of the principal and the more conducive the school climate, the higher the use of the independent teaching platform by teachers.

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## **Author Contributions**

Conceptualization; S. H.; methodology.; Y.; validation; formal analysis; R; investigation.; J; resources; S. H.; data curation: Y.; writing—original draft preparation. R.; writing—review and editing: J.; visualization: S. H. All authors have read and agreed to the published version of the manuscript.

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#### **Conflicts of Interest**

The authors declare no conflict of interest.

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