## The Effects of Teacher Performance and Classroom Climate on Student Attitude towards

Indonesian Language Learning in Embracing the Industrial Era 4.0

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#### Abstract

This study aims to gain information on the effects of teacher performance, as well as classroom climate, on student attitude toward Indonesian Language learning, embracing the Industrial Era 4.0 in Semarang Regency. This study was carried out using a quantitative approach of ex post facto type at six schools, in Semarang Regency, Indonesia. The sample of this research consisted of 172 students enrolled by random sampling technique. Data were collected using questionnaires. The data analysis techniques used were the descriptive analysis technique and the regression analysis technique. Results indicated that teacher performance had a significant influence on student attitude towards Indonesian Language learning, and classroom climate had a significant influence on student attitude towards the Indonesian Language. Embracing the Industrial Era 4.0, and teacher performance and classroom climate simultaneously had a significant effect on student attitude toward Indonesian Language learning in the Industrial Era 4.0.

Keywords: classroom environment, teacher performance, student attitude, and Indonesian language,

# Introduction

The Industrial Revolution 4.0 brings about changes in many aspects of life, including education. Education must be able to adapt with novel methods to respond to various changes that emerge in the technology sector (Abdelrazeq et al., 2016). Educational and learning processes must



be designed in such a way as to address current technological revolution in the context of the Industrial Era 4.0. The teachers of this smart era would have to enhance their knowledge, teaching skills and expertise as per the demands and needs of these students. The educationalists would have to educate these students to deal and compete with machines. Challenges of the Smart Societies and their possible solutions can be addressed by positively introducing these new technologies in pedagogy, curriculum design, ICT skills, fast learning, technology oriented and outcomes-based educational environments, where students will not feel any change while moving from classroom to industry (Pervez, Abosaq, Alandjani, & Akram, 2018).

Teachers hold a pivotal role in determining the educational quality of present days. Thus, they must think and plan thoroughly to increase learning opportunities for students, and they must also improve their teaching quality following current developments, which also encompass the Industrial Revolution 4.0 (Sawchuk, 2009). All professional development efforts should exist as part of an aligned system of teaching and learning that includes 21st century skills' standards, curriculum, instruction, and assessments (Bybee & Starkweather, 2006). While adding modern educational techniques and new technological gadgets, the importance of learning outcomes should not be ignored. There are chances that learning outcomes might slightly be changed but the overall learning goals would not be affected. To fulfill the requirements of future-proof education, the educators and institutions need to integrate IoT platforms into science and engineering curricula to help students develop digital literacy and innovation skills (Pervez et al., 2018).

Teacher appraisal can be a key lever for increasing the focus on teaching quality (OECD. & (OECD), 2013) and that many reforms in the past have failed (Kleinhenz, Ingvarson, & Chadbourne, 2004). An understanding of the various aspects of successful performance appraisal is essential. Performance appraisal can be defined as the ongoing process used for identifying, measuring and developing an individual's performance in accordance with an organisation's strategic goals (Aguinis, 2019). Appraisal may involve formative aspects that focus on developing



performance, such as career development, professional learning and feedback. Summative aspects, on the other hand, evaluate performance for career progression, possible promotion or demotion and termination purposes. The Effectiveness of Performance Appraisal falls into three main groups: the first group examines the variations in student learning from teachers within the appraisal process, the second evaluates teacher perceptions of the impact of the process on their practice and levels of motivation and the third evaluates effective performance appraisal conditions (Isore, 2009). Teaching is an effort to create a condition or environmental system that supports and enables a learning process. A teacher's performance in engaging students in the classroom, therefore, is of much importance as it is students as educational subjects who plan and conduct learning who must be active. If they are active and participative in the learning process, they will not only benefit in the academic achievement aspect, but also in their attitude as well as other social aspects. Obviously, this will be highly dependent on how good the classroom climate is when a learning activity is ongoing (Timperley, Wilson, Barrar, & Fung, 2007).

This urges some changes to classroom organisation, teaching methods, learning strategies, and teacher attitudes and characteristics in the management of a learning process. Teachers act as managers of the learning process and as facilitators who endeavour to create an effective learning climate, enabling a learning process to take place, developing learning materials well, and enhancing student abilities to follow the lesson and achieve the learning objectives they are supposed to accomplish. To that end, teachers should be able to manage the learning process in a way that can stimulate students to learn, as students are the principal subjects in a learning process who are expected to have knowledge and skills to be able to decipher, interpret, detect patterns, and communicate using imagery (Frey & Fisher, n.d.).

In a report by the Technical Education and Skills Development Authority (2016) it is stated that with the emergance of the Industrial Era 4.0, more than one-third of the core skill sets favoured by most jobs in 2020, will be made up of skills having been deemed trivial up to now. Social skills



such as persuasion, emotional intelligence, and social attitudes will be more desirable than specific technical skills and cognitive intelligence. The North Central Regional Education Laboratory (NCREL) and the Metiri Group have also identified a framework for Industrial Era 4.0 skills, which is organised into four categories: digital age literacies, inventive thinking, effective communication, and high productivity (NCREL & Group, 2003).

That report suggests that one of the most material aspects students must have from an early stage to face the Industrial Revolution 4.0, is social attitude. A learning process must be able to guide students towards an agreeable social attitude. This is what underlies the importance of studying the various attitudes. This ability is an essential life skill. Understanding and embracing cultural and social differences and using those differences to develop new ideas and new solutions to problems are increasingly important in social spheres as well as in the workplace (Bishop, n.d.)). (NCREL & Group, 2003) argue that students should be able to interact effectively with others, conduct themselves in a respectful and professional manner, work effectively in diverse teams, respond open-mindedly to different ideas and values, and be able to work effectively with people from a range of social and cultural backgrounds.

The National Board for Professional Teaching Standards (NBPTS) voluntary certification process in the United States is a performance appraisal system that both develops and recognises quality teaching. (Sykes, 2006) teachers involved in the certification process went on to apply what they had learnt in the classroom and had a newfound enthusiasm for teaching and learning. According to the OECD, there are four key elements in the development of an effective performance appraisal system (Isore, 2009): 1) Teachers are involved in the process; 2) Stakeholders understand the process and develop a common language of quality; 3) Teachers have opportunities to express their perceptions and concerns throughout the process; 4) Teachers have confidence in the evaluation.



The phenomenon in the field is that, in some cases in primary schools in Semarang Regency, the results of teacher competence testing demonstrates relatively low competence. This low competence resulted in unfavourable teachers' performance in the learning process (Kartowagiran, 2011).

From some other observations conducted at a number of schools (in Indonesian Language learning, in particular), it was found that the classroom climate of such schools had yet to be able to support the effort to achieve maximal learning outcomes. This finding requires adressing, as classrom climate becomes an indispensable part in student development (Tarmidi, 2006). A good classroom climate will help students get engaged and succeed in learning activities (Reyes, Brackett, Rivers, White, & Salovey, 2012).

The various issues above-mentioned leave an impact on the outcomes of Indonesian Language learning in multiple aspects, for example, knowledge, attitude, and skill (Ministry of Education Indonesia, 2003).

This study focused on student attitude towards Indonesian Language learning. We assessed how teacher performance affected student attitude towards Indonesian Language, how classroom climate affected student attitude towards Indonesian Language learning, and also assessed how teacher performance and classroom climate simultaneously affected student attitude towards Indonesian Language learning in embracing the Industrial Era 4.0.

### **Research Methods**

The study was a quantitative approach of ex-post fact type and the data were taken from SDN Bergaskidul, SDN Kalirejo, SDN Kebon Agung, SDN Lerep, SDN Pasekan, and SDN Wonorejo. The total number number of sampled students was about 1,008. The average class size was 28 students. The sampled school belonged to six primary school in Semarang Regency, and



the sample size was approximately 27.7% of the school population. In general, all the fouth-grade classes in each sampled school were selected.

### Measures

Teacher performance, according to the literature and to the Hay Group recommendations, improves when the following conditions are present: a) opportunities for teacher self-reflection and goal setting (Ross & Bruce, 2007); b) regular classroom observation and the provision of constructive feedback from school leaders or managers and peers (Avalos, 2011); c) frequent feedback on classroom performance as an ongoing dialogue not an annual discussion (Wang, 2007); d) opportunities to contribute to and engage in teamwork, collaboration and action learning with other teachers (Bean, 2007). Teacher performance is the ability of a teacher to demonstrate his/her skills or competences while teaching Indonesian Language in class (Jamaluddin, n.d.). The indicators measured are concept mastery, understanding of student characteristics, ability to manage learning, mastery of learning strategies, and ability to conduct assessment.

Classroom climates described as positive have been found to be related to important educational outcomes such as enhanced academic achievement, constructive learning processes, and reduced emotional problems (Walberg, 2008); (Fraser, 1998). Classroom climate is operationally defined as a situation that arises out of the interaction established between teacher and students or between one student and another (Evans, Harvey, Buckley, & Yan, 2009). The indicators measured are student cohesiveness, student engagement in learning, student satisfaction, and teacher support.

Language attitudes (positive or negative) is a psychological event that can be observed through behaviour. Attitudes and behaviours relate in reciprocity. Have passion and have a sense of pride towards local languages or the languages of Indonesia, as well as continually strive to maintain and use local languages or languages of Indonesia in accordance with its needs, shows a



positive attitude (Wijayanti, Darmoyo, & Dhian, 2018). Attitude towards Indonesian Language learning in embracing the Industrial Era 4.0 is operationally defined as the degree of student affection for Indonesian Language learning (Ahmad, 2018). The indicators measured are what the students needed for Indonesian Language material, the importance of learning Indonesian Language from the students' perspective, the students' feelings about Indonesian Language learning, and the students' tendency to act in Indonesian Language learning in embracing the Industrial Era 4.0.

#### Statistical Analysis

In this research, data collection was carried out using questionnaires. The data collected were analysed using an inferential statistics analysis with regression analysis through requisite testing in the form of normality and linearity testing. The researcher analysed it by using SPSS 16.0 program through simple linear regression analysis.

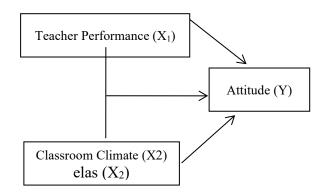


Figure 1. Research Design

Figure 1 indicates two independent variables, teacher performance  $(X_1)$  and classroom climate  $(X_2)$ , and one dependent variable, student attitude (Y).

To conduct an inferential analysis, statistical hypotheses should be formulated. This formula is used to determine the direction of the relationship between the independent variables (X1 and X2) and the dependent variable (Y) whether each independent variable is positively or negatively related, and to predict the value of the dependent variable if the independent variable value increases or decreases. The statistical hypotheses formulated in this research are as follows.

1.  $H_0: \rho_{YX_1} = 0$ 

$$H_a: \rho_{YX_1} \neq 0$$

- 2.  $H_0: \rho_{YX_2} = 0$ 
  - $H_a: \rho_{YX_2} \neq 0$
- 3.  $H_0: \rho_{YX_1X_2} = 0$

$$H_a: \rho_{YX_1X_2} \neq 0$$

## Results

This research focused on three things: the effect of teacher performance on student attitude towards Indonesian Language learning; the effect of classroom climate on student attitude towards Indonesian Language learning; and the simultaneous effect of teacher performance and classroom climate on student attitude towards Indonesian Language learning. The three are outlined as follows.

# The Effect of Teacher Performance on Student Attitude towards Indonesian Language Learning in embracing the Industrial Era 4.0

Hypothesis I concerns the effect of teacher performance on student attitude towards Indonesian Language learning in embracing the Industrial Era 4.0. A simple regression analysis was conducted to test the hypothesis.

Unstandardised				
Model	Coefficients		t	Sig.
	В	Std. Eror		
Constant	6.8	1.58	4.31	.000
Teacher	2	.01	15.0	.000
Performance	.26		8	

Table 1. Simple Regression Analysis Results

It was found that the p-sig (0.00) < alpha (0.05) (Table 1). Accordingly, H<sub>0</sub> was rejected, or, in other words, it was statistically proven that there was a significant relationship between teacher performance and student attitude towards Indonesian Language learning. From the correlation testing, the following was obtained.

Table 2. X1-Y Correlation Testing Results

Model	R	R	Adjusted
		Square	R Square
Constant	.757	.573	.570
Teacher			
Performance			

Based on the data presented above, the coefficient of the correlation between teacher performance and student attitude towards Indonesian Language learning was 0.757. Such coefficient indicates that the correlation between the variable teacher performance and the variable student attitude towards Indonesian Language learning fell into a high category. Additionally, based on Table 1 and Table 2,the coefficient a (constant) was 6.82 and coefficient b was 0.26. Hence, the equation of the simple regression between teacher performance and student attitude towards Indonesian Language learning is as follows:

 $\hat{\mathbf{Y}} = 6.82 + 0.26 \, \mathrm{X}_1,$ 

where  $\hat{Y}$  = student attitude, and  $X_1$  =teacher performance.

From the regression equation above, it can be concluded that an increase in teacher performance by 1 unit can increase student attitude towards Indonesian Language learning by 0.26 units. This suggests a positive correlation between the two variables, meaning that if the teacher performance is good, the student attitude will also be good.

# The Effect of Classroom Climate on Student Attitude towards Indonesian Language Learning in embracing the Industrial Era 4.0

Hypothesis II concerns the effect of classroom climate on student attitude towards Indonesian Language learning in embracing the Industrial Era 4.0. A simple regression analysis was conducted to test the hypothesis, and the results are described below.

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Unstandardised				
Model	Coefficients		t	Sig.
	В	Std. Eror		
Constant	5.1	1.96	2.6	.000
Classroom	4	.03	2	.000
Climate	.44		13.	
			02	

Table 3. Simple Regression Analysis Results

It was found that the p-sig (0.00) < alpha (0.05) (Table 3). Accordingly, H<sub>0</sub> was rejected, or, in other words, it was statistically proven that there was a significant relationship between classroom climate and student attitude towards Indonesian Language learning. From the correlation testing, the following was obtained.

Model	R	R	Adjusted
		Square	R Square
Constant	.707	.499	.496
Classroom			
Climate			

Table 4. X<sub>2</sub>-Y Correlation Testing Results

Based on the data presented above, the coefficient of the correlation between classroom climate and student attitude towards Indonesian Language learning was 0.707. Such coefficient indicates that the correlation between the variable classroom climate and the variable student attitude towards Indonesian Language learning fell into a high category. Additionally, based on Table 3 and Table 4, the coefficient a (constant) was 5.14 and the coefficient b was 0.44. Hence, the equation of the simple regression between classroom climate and student attitude towards Indonesian Language learning is as follows:

$$\hat{\mathbf{Y}} = 5.14 + 0.44 \, \mathrm{X}_2$$

where  $\hat{Y}$  =student attitude, and  $X_2$  = classroom climate.

From the regression equation above, it can be concluded that an increase in classroom climate by 1 unit can increase student attitude towards Indonesian Language learning by 0.44 units. This suggests a positive correlation between the two variables, meaning that if the classroom climate is good, the student attitude will also be good.

# The Simultaneous Effect of Teacher Performance and Classroom Climate on Student Attitude towards Indonesian Language Learning in embracing the Industrial Era 4.0

Hypothesis III concerns the simultaneous effect of teacher performance and classroom climate on student attitude towards Indonesian Language learning in embracing the Industrial Era 4.0. A multiple regression analysis was conducted to test the hypothesis, and the results are described below.

Unstandardised				
Model	Coefficients		t	Sig.
	В	Std. Eror		
Constant	4.8	1.79	2.71	.000
Teacher	6	.03	5.90	.000
Performance	.19	.06	2.25	.002
Classroom	.13			
Climate				

Table 5. Multiple Regression Analysis Results

Based on the results, it was found that the p-sig (0.00) < alpha (0.05). Accordingly, H<sub>0</sub> was rejected, or, in other words, it was statistically proven that teacher performance and classroom climate simultaneously had a significant relationship with student attitude towards Indonesian Language learning. From the correlation testing, the following was obtained.

Model	R	R	Adjusted
model	ĸ	Square	R Square
Constant	.765	.585	.580
Teacher			
Performance			
– Classroom			
Climate			

Table 6. X1X2-Y Correlation Testing Results

Based on the data presented above, the coefficient of the correlation between teacher performance and classsroom climate towards Indonesian Language learning was 0.767. Such coefficient indicates that the correlation between teacher performance as well as classroom climate (simultaneously) on student attitude towards Indonesian Language learning fell into a high category. Additionally, based on Table 5 and Table 6, the coefficient a (constant) was 4.86, the coefficient  $b_1$  was 0.19, and the coefficient  $b_2$  was 0.13. Hence, the equation of the multiple regression between teacher performance as well as classroom climate (simultaneous) on student attitude towards Indonesian Language learning is as follows:

$$\hat{\mathbf{Y}} = 4.86 + 0.19 \, \mathrm{X}_1 + 0.13 \, \mathrm{X}_2$$

where  $\hat{Y}$  = student attitude, X<sub>1</sub>=teacher performance, and X<sub>2</sub> = classroom climate

From the regression equation above, it can be concluded that with a = 4.86, in the absense of change in X<sub>1</sub>and X<sub>2</sub>, the Y consistency value will be 4.86. Besides,  $b_1 = 0.19$  cab be interpreted that an increase in X<sub>1</sub> by 1 unit will increase Y by 0.19 unit on the assumption that there is no increase in X<sub>2</sub>, or X<sub>2</sub> is controlled. Meanwhile,  $b_2 = 0.13$  is interpreted that an increase in X<sub>2</sub> by 1 unit will increase Y by 0.13 on the assumption that there is no increase in X<sub>1</sub>, or X<sub>1</sub> is controlled. Such results above show a positive correlation between the variables, meaning that if the teacher performance and classroom climate are good, the student attitude will also be good.

To help interpret the intervariable relationships, a summary of the correlation testing results between the three variables studied is presented below.

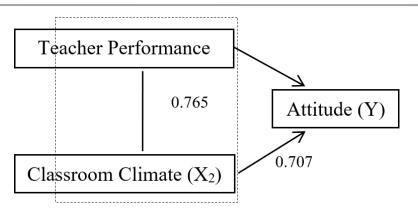


Figure 2. Summary of Correlation Results

Figure 2 presents the informaton on the relationships between variables. Based on the figure above, the effect of teacher performance on student attitude basically tended to be analogous to that of classroom climate on student attitude. Besides, the simultaneous influence of teacher performance and classroom climate on student attitude was also pretty high, suggesting that both teacher performance and classroom climate played an imperative role in bettering student attitude towards Indonesian Language learning.

Other findings described are the coefficient of determination. Coefficient of determination/R-Squared ( $R^2$ ) is a ratio of variation in Y that is explained by X<sub>1</sub> and X<sub>2</sub> simultaneously in comparison to the total variation in Y. Based on the determination analysis, the R-Squared obtained was 0.585 (Table 6). This coefficient suggests that the relative contribution of a combination of X<sub>1</sub> and X<sub>2</sub> to Y accounted for 58.5%, while the rest was influenced by other variables. It can be explained as in the variables teacher and classroom climate had an effect as big as 58.5% on student attitude towards Indonesian Language learning, while the remaining 41.5% was explained by other variables.

## Discussion

One of the aspects most crucial to students' preparation for the Industrial Revolution 4.0 is the attitudinal aspect. By building attitude, teachers have prepared students at the present time for future jobs as an effort to reinforce social protection against possible adverse impacts of the Industrial Revolution 4.0 (Albert et al., 2018).

Teacher performance in the learning process is one of the key factors in the attempt to achieve maximum learning quality and outcomes. Empirically, this research has proven that teacher performance in the learning process significantly affected student attitude towards Indonesian Language learning. In relation to teacher performance in class, learning activities must be designed to address the Industrial Revolution 4.0. Innovative technologies and latest technology-based new methods are highly recommended for teachers to apply in every learning activity to assist their performance (Abdelrazeq, Janssen, Tummel, Richert, & Jeschke, 2016).

Findings of this research seem to be supported by those of previous research studies, one of which was conducted by (Corcoran & O'Flaherty, 2018: 175), which described that teacher performance is a strong predictor of an improvement of students' learning outcomes, which may take the form of knowledge, attitude, and skills. Teacher performance is a noteworthy factor deserving attention for the improvement of educational quality (Wenno, 2016).

Furthermore, Schacter (2005) (Schacter, 2005) revealed that teacher performance quality is the most imperative variable in the improvement of student achievement. The teacher's influence on students' achievement has proven more significant than any other factors. As a result, only teachers of good quality can provide students with the best education. In other words, educational quality is extremely dependent on teacher quality (Tehseen & Ul Hadi, 2015). (Elliott, 2015) in his research, in a similar fashion, stated that teacher performance quality is the only and the most important variable that influences student achievement.

The teacher is a highly substantive element in the educational system. Therefore, developing teacher quality is one of the steps to improving educational systems. Teachers are enabled to develop students' personal and intellectual characteristics through professional development (Almeida, 2017). For this reason, to have high-quality student outputs, the quality of the teachers must also be good, which can be indicated by their performance in the learning process in class.

Welcoming the Industrial Era 4.0, teachers must renew their awareness and perspectives, as educators today cannot play a role fully as agents of knowledge transfer. Not only are they able to store and even transfer knowledge in a sophisticated way, students now can also acquire any knowledge they seek with ease and in no time. In addition, a brand new mindset must be able to challenge teachers to continuously find novel approaches to learning and focus on the learning in class at all times, for example, on the development of students' characters and soft skills like empathic communication skills, tolerant attitude, responsibility, open-mindedness, and cooperativeness (Afrianto, 2018).

It is not only about teacher performance, but classroom climate is no less crucial and deserves attention from teachers. This research empirically proved that classroom climate had a significant effect on student attitude towards Indonesian Language learning. This finding is in line with the findings of (Reyes et al., 2012), who explained that classroom climate is highly essential to student development. A favourable classroom climate will help students get engaged and succeed in the learning process. (Hendrickx, Mainhard, Boor-Klip, Cillessen, & Brekelmans, 2016); (Wubbels, 1995) added that classroom climate is resulted from the teacher's management efforts and students' participation. Classroom climate can be incorporated in the methods to improve students' knowledge.

Learning management that is centred on students and classroom climate improvement is dissimilar to traditional teacher-centred learning management. As a case in point, based on the



traditional concept, the teachers' role is teaching, while based on the new one, they offer advice, mediate, and learn together with the students. In the same way, students in the past passively took in knowledge, while in the present, they generate knowledge on their own. Consequently, learning management is changing. In former times, teachers delivered materials and assigned tasks, but presently, students work and learn together. Evaluation in days past was based on the performance of students who showed that they had gained new knowledge, but today, evaluation helps teachers develop and diagnose students' learning as well as identify which components are to be improved (Alane, 2005).

Similarly, (Gutiérrez & Tomás, 2018)Gutierres & Thomas (2018: 94) state that classroom climate is one of the predictors of students' success in class. A pleasant classroom climate will raise students' learning motivation, bring students' satisfaction, and build students' attitude in learning. The drive to engage in learning activities indirectly has a significant, positive impact on students' success in achieving learning objectives.

Classroom climate is a factor that significantly intensifies students' engagement in learning, along with teachers' teaching method and learning activities (Sriklaub, Wongwanich, & Wiratchai, 2015). Classroom climate refers to the social interaction between students and teacher with regard to beliefs, values, and collective attitude prevaling in the classroom (Rathmann, Herke, Hurrelmann, & Richter, 2018). Hence, it is imperative that teachers develop a classroom climate that is engaging and supportive of the effective learning activities.

Classroom climate is a broad construct made up of students' feeling about their teacher and peers. Students' perspective on classroom climate has a significant impact on learning, motivation, satisfaction, and achievement. Teachers must always consider how their behaviour may be interpreted by students as something positive and keep a condusive classroom climate in mind when developing a learning programme. Taking such effort will enable improvement of positive outcomes for students and level of satisfaction for teachers (Barr, 2016).

Classroom climate includes students' perspective on classroom situation, their interaction with either teacher or classmates, and their engagement in class. Although every student will have his/her own perspective on the classroom environment, he/she will also develop a sense of community, or collectiveness, with other students and the teacher. In other words, classroom climate is a common feeling shared by everyone in the classroom. Classroom climate is a reflection of students' opinion on their learning experience in class (Reid & Radhakrishnan, 2003).

Classroom climate is basically not the sole factor affecting the success of learning activities in class. It bears a close relationship with teacher performance in the learning activity. For the classroom management and classroom climate improvement to be effective, teachers must take students' needs and backgrounds into account (Land & Hannafin, 2000; Narum, 2004). With regard to teacher performance, teachers must develop learning concepts centred to students (Khammanee, 2004; Sengdonpai, 2007).

As for the teachers' role in the learning process, teachers need to implement an adaptation programme, for example, adapting curriculum content to the content prepared for the students suitable for the 21<sup>st</sup> century abilities and choosing and applying latest learning models suitable for millinnial students. This includes implementing blended learning and using social media for teaching and learning. In this way, teachers will be able to secure the best benefit of the Industrial Era 4.0 for the future of our national education (Afrianto, 2018).

Based on the description above, both teacher performance and classroom climate are essential elements in the improvement of learning quality. Particularly in improving student attitude towards Indonesian Language learning, teacher performance and classroom climate have been proven to have significant, positive effects on student attitude.



## Conclusion

Based on the research results and the discussion, the conclusions drawn from this research are as follows.

- 1. Teacher performance affected student attitude towards Indonesian Language learning in embracing the Industrial Era 4.0.
- 2. Classroom climate affected student attitude towards Indonesian Language learning in embracing the Industrial Era 4.0.
- 3. Teacher performance and classroom climate simultaneously affected student attitude towards Indonesian Language learning in embracing the Industrial Era 4.0.

# Suggestions

Based on the conclusions above, the following suggestions are offered.

- 1. To embrace the Industrial Era 4.0, it is necessary to build and improve student attitude by improving and maximising teacher performance in class.
- 2. To improve student attitude towards Indonesian Language learning, it is suggested to improve and maximise the learning climate in class. This is based on the fact that classroom climate has a positive effect on student attitude.
- 3. The government of Semarang Regency through the Office of Education is suggested to provide facility through assistance so that teachers will be able to improve their performance and abilities in managing classroom and a good classroom climate can be created. The assistance may take the form of education assistance and trainings on performance improvement or further study assistance for teacher achievers to better the quality of teachers, especially who teach Indonesian Language, in embracing the Industrial Era 4.0.



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# References

- Abdelrazeq, A., Janssen, D., Tummel, C., Richert, A., & Jeschke, S. (2016). Teacher 4.0:
  Requirements of the Teacher of the Future in Context of the Fourth Industrial Revolution. *ICERI2016* Proceedings, 1(October 2018), 8221–8226.
  https://doi.org/10.21125/iceri.2016.0880
- Afrianto, A. (2018). Being a Professional Teacher in the Era of Industrial Revolution 4.0: Opportunities, Challenges and Strategies for Innovative Classroom Practices. *English Language Teaching and Research*, 2(1).

Aguinis, H. (2019). An expanded view of performance management. (January).

Ahmad, D. E. (2018). Sikap Bahasa Mahasiswa Program Studi Pendidikan Dasar Pascasarjana Universitas Negeri Makassar Terhadap Bahasa Indonesia. (1), 95–101.

ALANE JORDAN STARKO. (2005). CREATIVITY IN THE CLASSROOM.

- Albert, J. R. G., Orbeta Jr, A. C., Paqueo, V. B., Serafica, R. B., Dadios, E. P., Culaba, A. B., ... Bairan, J. C. A. C. (2018). Harnessing government's role for the Fourth Industrial Revolution.
- Almeida, J. C. D. (2017). Teacher performance evaluation: The importance of performance standards. *International Journal for Cross-Disciplinary Subjects in Education (IJCDSE), Vol. 8*, (1)
- Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, 27(1), 10–20. https://doi.org/10.1016/J.TATE.2010.08.007

Barr, J. J. (2016). Developing a Positive Classroom Climate. IDEA Paper# 61. IDEA Center, Inc.

Bean, R. (2007). The promise and potential of literacy coaching. PASHCI Portfolio Report, 2-3.

- Bishop, J. (n.d.). Partnership for 21 Century Skills (P21). Retrieved from https://www.imls.gov/assets/1/AssetManager/Bishop Pre-Con 2.pdf%0D
- Bybee, R. W., & Starkweather, K. N. (2006). The twenty-first century workforce: A contemporary challenge for technology education. *Technology and Engineering Teacher*, *65*(8), 27.
- Corcoran, R. P., & O'Flaherty, J. (2018). Factors that predict pre-service teachers' teaching performance. *Journal of Education for Teaching*, 44(2), 175–193. https://doi.org/10.1080/02607476.2018.1433463

Elliott, K. (2015). Teacher Performance Appraisal: More about Performance or Development? 40(9).

- Evans, I. M., Harvey, S. T., Buckley, L., & Yan, E. (2009). Differentiating classroom climate concepts: Academic, management, and emotional environments. *Kötuitui: New Zealand Journal* of Social Sciences Online, 4(2), 131–146.
- Fraser, B. J. (1998). Classroom Environment Instruments: Development, Validity and Applications. Learning Environments Research, 1(1), 7–34. https://doi.org/10.1023/A:1009932514731
- Frey, & Fisher. (n.d.). Formative Assessment Action Plan: Practical Steps to More Successful Teaching and Learning. ASCD. Learn, Teach, Lead.
- Gutiérrez, M., & Tomás, J.-M. (2018). Motivational Class Climate, Motivation and Academic Success in University Students. Revista de Psicodidáctica (English Ed.), 23(2), 94–101. https://doi.org/10.1016/J.PSICOE.2018.02.001
- Hendrickx, M. M. H. G., Mainhard, M. T., Boor-Klip, H. J., Cillessen, A. H. M., & Brekelmans, M. (2016). Social dynamics in the classroom: Teacher support and conflict and the peer ecology. *Teaching and Teacher Education*, 53, 30–40. https://doi.org/10.1016/j.tate.2015.10.004

Isore. (2009). Teacher evaluation: Current practices in OECD countries and a literature review (No. 23). Paris.
Jamaluddin. (n.d.). THE EFFECT OF INDONESIAN LANGUAGE TEACHER
COMPETENCY TOWARDS THE RESULT OF THE STUDY OF SMAN 1

TAMALATEA, JENEPONTO REGENCY 'S STUDENTS.

Kartowagiran. (2011). KINERJA GURU PROFESIONAL. XXX(3), 463-473.

- Khammanee. (2004). Teaching sciences: Knowledge for effective instruction. Bangkok: Chulalongkorn University Press.
- Kleinhenz, E., Ingvarson, L., & Chadbourne, R. (2004). Teacher evaluation uncoupled: A discussion of teacher evaluation policies and practices in Australian states and their relation to quality teaching and learning. *Dr. Lawrence Ingvarson*, 58.
- Land, S. M., & Hannafin, M. J. (2000). Student-centered learning environments. *Theoretical Foundations of Learning Environments*, 1–23.
- Ministry of Education Indonesia. (2003). UU RI NO 20 Tahun 2003.
- Narum, J. L. (2004). What lasts: An essay: A learner-centered environment. The Project Kaleidoscope Volume.
- NCREL, & Group, M. (2003). enGauge 21st century skills: literacy in the digital age.
- OECD., & (OECD), O. for E. C. and D. (2013). Teachers for the 21st century: Using evaluation to improve teaching. OECD Publishing.
- Pervez, S., Abosaq, N. H., Alandjani, G., & Akram, A. (2018). 21ST CENTURY EDUCATIONAL REQUIREMENTS AND TEACHING STRATEGIES FOR COMPETING WITH THE CYBORGS 21ST CENTURY EDUCATIONAL REQUIREMENTS AND TEACHING STRATEGIES FOR COMPETING WITH THE CYBORGS.
- Rathmann, K., Herke, M. G., Hurrelmann, K., & Richter, M. (2018). Perceived class climate and schoolaged children 's life satisfaction: The role of the learning environment in classrooms. 1–21. https://doi.org/10.5157/NEPS
- Reid, L. D., & Radhakrishnan, P. (2003). Race matters: The relation between race and general campus climate. *Cultural Diversity and Ethnic Minority Psychology*, 9(3), 263.

- Reyes, M. R., Brackett, M. A., Rivers, S. E., White, M., & Salovey, P. (2012). Classroom Emotional Climate , Student Engagement , and Academic Achievement. 104(3), 700–712. https://doi.org/10.1037/a0027268
- Ross, J. A., & Bruce, C. D. (2007). Teacher self-assessment: A mechanism for facilitating professional growth. *Teaching and Teacher Education*, 23(2), 146–159.

Sawchuk, S. (2009). 21st century skills" focus shifts teachers' role.

- Schacter, J. (2005). Teacher Performance-Based Accountability: Why, What and How. Santa Monica, 1–16.
- Sengdonpai. (2007). The development of a causal model of organizing learner-centered instruction (Unpublished master degree thesis). Chulalongkorn University, Bangkok.
- Sriklaub, K., Wongwanich, S., & Wiratchai, N. (2015). Development of the Classroom Climate Measurement Model. (May). https://doi.org/10.1016/j.sbspro.2015.01.253
- Sykes, G. (2006). National Board Certification as Professional Development: University of Massachusetts Lowell.
- Tarmidi. (2006). Classroom Climate and Learning Achievement.
- Tehseen, S., & Ul Hadi, N. (2015). Factors Influencing Teachers' Performance and Retention. Mediterranean Journal of Social Sciences, (January). https://doi.org/10.5901/mjss.2015.v6n1p233
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). Teacher professional learning and development: Best evidence synthesis iteration. Ministry of Education.
- Walberg, H. J. (2008). 4: Psychology of Learning Environments: Behavioral, Structural, or Perceptual? Review of Research in Education, 4(1), 142–178. https://doi.org/10.3102/0091732x004001142
- Wang, W. (2007). Evaluation of 2+ 2 alternative teacher performance appraisal program in Shanxi, People's Republic of China. *Teaching and Teacher Education*, 23(7), 1012–1023.

Wenno, I. H. (2016). Effect of Principal Managerial Leadership and Compensation towards Physics

Teacher Performance in Senior High School in Baguala District-Ambon. *International Education Studies*, *10*(1), 233. https://doi.org/10.5539/ies.v10n1p233

Wijayanti, S.H, Darmoyo, S & Dhian, Y. . (2018). Language Attitude of Elementary Teachers towards Indonesian Formal Writing. *Jurnal Pendidikan Bahasa Dan Sastra*, 18(1), 28–43. https://doi.org/10.17509/bs

Wubbels, T. (1995). An Interpersonal Perspective on Teacher Behaviour in the Classroom Theo Wubbels.