

The Influence of Classroom Climate Inventory on High-Quality Learning Practices of Junior High School Students

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Abstract

The purpose of this study was to determine what domain that influences of classroom climate inventory on high-quality learning practices of Junior high school students. This research included 200 Laureta National High School grade 10 students as participants. The statistical tools used were mean, Pearson-r, and Regression Analysis. This paper's research design was quantitative non-experimental research using the correlational technique with regression analysis. Results show that the quality of classroom climate inventory of Junior high school students is very high, which suggests that classroom climate inventory is very much observed. The level of high-quality learning practices of junior high school students is extremely high, which signifies that high-quality learning practices are very much evident. Therefore, Correlation results revealed a significant relationship between the classroom climate inventory and high-quality learning practices. Thus, among the seven indicators in the independent variables, individualization shows that the school promotes an organized and purposeful atmosphere for learning of the student's effective classroom climate inventory influences on high-quality learning practices.

Keyword: MAED - Classroom Climate Inventory, High-Quality Learning Practices, Junior High School Students, Philippines.

1. Introduction

High-quality learning practices have been the objective of the learning institution and the underlying goal of educational reforms for this will be the product of effective facilitation of the teachers. The Organization for Economic Co-operation and Development (OECD) shows that in developed countries, establishing an effective approach in developing competent learners and assisting them in realizing their full potential has been a major concern in educational systems. Data from Teaching and learning International Survey (TALIS) sponsored by OECD revealed that Two-thirds of teachers having a class discussion focus

mostly on managing the class and assuring clarity of instruction. Further, 78% of the typical lesson spent on teaching, with the remaining time allocated in maintaining order or dealing with classroom administrative responsibilities. This implies a decline in time spent on real teaching and learning of the students in approximately half of the nations that participate in TALIS over the last five to ten years (Revai, 2018).

In the Philippines, two assessment sponsored by OECD, the Program for International Student (PISA) in 2018 shown the Filipino students ranked 78 out of 79 countries in Junior High School participants. While in the Trends in International Mathematics and Science Study (TIMSS) in 2019 reported that 80 percent of Junior High School students fall below the minimum proficiency levels. Such signified that there seems to be a problem in the learning process that needs to address. International standards tried to accommodate Filipino learners in response to calls for regionalization and globalization (Sadera et al., 2020).

High quality learning can be determined if the teaching quality has been empowered when students are performing better in class. The learning practices are highly emphasized for this will lead to better output and productive outcome. Further to help students comprehend the desired outcomes, effective teachers must develop and establish clear lesson goals. Thus, the structural and educational systems are interconnected to quality in teaching and learning practices (Da Costa & Araujo, 2018).

On the other hand, classroom climate is a setting that distinguishes one from the other. It will foster a connection between teacher and students and student to students. Climate is the quality of the environment (physical and non-physical) that each human perceives and experiences on a continuous basis, which directly influences and dictates the behavior of a wide range of daily activities of the students inside the classroom (Hoy & Miskell, 2019).

In Tagum City, despite having access to effective learning strategies, teachers still face challenges from the diversity of our students in terms of their engagement in class and their ability to focus and follow instructions during class activities. In this regard, the researcher believes that further research is needed to acquire data that reveals the complexities of how classroom climate influence quality learning practices. To better understand how student learning outcomes affects teaching strategies, it's necessary to go deeper into teachers' classroom methods. Action plans can then be developed to augment classroom climate towards the development of quality learning practices and therefore the necessity for this research.

The researcher has not come across a study that is exactly like dealing with the classroom climate of teachers and high-quality learning practices in the local setting. To determine the correlation between variables, the researcher is prompted to undertake the study, thus the urgency to conduct the study.

1.1. Conceptual Framework

Presented in Figure 1 is the Conceptual Framework of the study. As the framework shows, the first independent variable is Classroom Climate (Barr, 2016) with the indicators namely, personification, involvement, student cohesiveness, satisfaction, task orientation, innovation, and individualization. In this study, personification means the instructor encourages student-teacher engagement and demonstrates concern for the students' well-being. Involvement is the act of participating in something. Student cohesiveness means in class, the instructor promotes active participation from the students. Satisfaction means students are courteous towards others, know one another, and aid one another. Task orientation means the activities in class are well-defined and arranged. Innovation means unique teaching methods, activities, or assignments are

used by the instructor. Individualization means students are given the freedom to make choices and are treated differently depending on their abilities and interests.

The dependent variable of this study is high quality learning practices (MacGregor, 2017) with the following indicators, designing effective, standards-based instruction is a teaching method that is based on standards of skill mastery. Delivering high quality -student-centered instruction refers to enhance provides options to strengthen the student learning experience. Promoting high levels of student engagement is important because it is linked to increased student achievement. Using assessment for student learning refers to learning must be assessed through performance: what students can do with their learning. Using positive behavior management strategy refer to evidence-based, proactive approaches to changing challenging student behavior. Having clear evidence that students are learning an opportunity to reflect on and demonstrate their thinking and learn during each lesson.

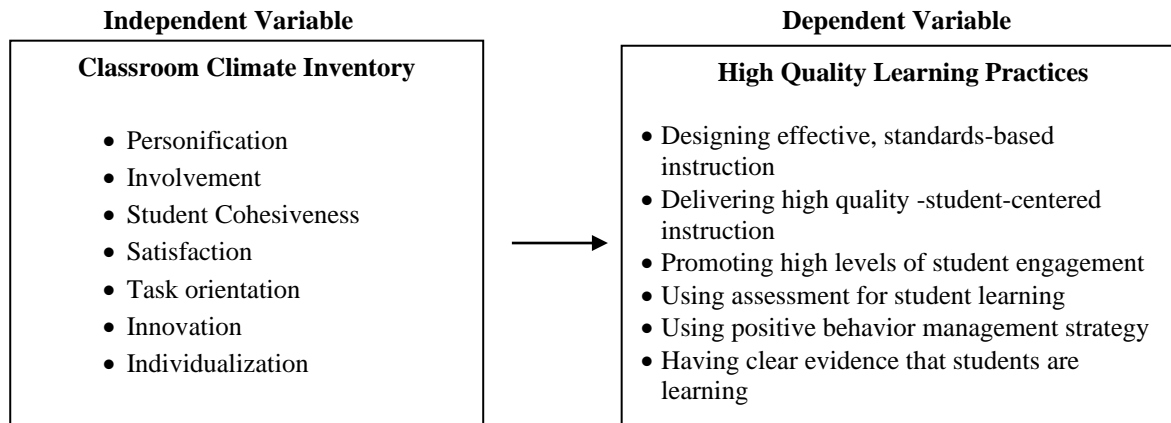


Figure 1. Conceptual Framework of the Study

1.2 Statement of the Problem

The main purpose of the study is to determine which domain in the classroom climate significantly influences the high-quality learning practices. Specifically, it aims to answer the following specific objectives:

1. To describe the level of classroom climate inventory in terms of:
 - 1.1 personalization,
 - 1.2 involvement,
 - 1.3 student cohesiveness,
 - 1.4 satisfaction,
 - 1.5 task orientation,
 - 1.6 innovation, and
 - 1.7 individualization.
2. To describe the level of high-quality learning practices in terms of:
 - 2.1 designing effective, standards-based instruction,
 - 2.2 delivering high quality -student-centered instruction,
 - 2.3 promoting high levels of student engagement,
 - 2.4 using assessment for student learning,
 - 2.5 using positive behavior management strategy, and
 - 2.6 having clear evidence that students are learning.
3. To determine the significant relationship between classroom inventories and high-quality learning practices.

4. To find out what domain in the classroom climate inventory teacher student significantly influences the high-quality learning practices.

2. Methodology

2.1 Research Design

The researcher needs to consider possible alternative explanations, to jointly analyze several variables, and to present conclusions without making definitive causal statements. This includes published studies that will be incorporated into the discussion to facilitate understanding (Creswell, 2015). Quantitative Nonexperimental research design utilizing correlation technique with regression analysis was used in this study aims to discover relationships among variables and to allow the prediction of future events from present knowledge (Wallinga & Stingor, 2019).

Non-experimental quantitative research is an important area of research for educators because there are so many important but non manipulable independent variables needing further study in the field of education, (Johnson, 2001). This is appropriate for the present study for it deals with the classroom climate of and high-quality teaching-learning practices.

2.2 Participants of the Study

The respondents of the study will be the students in a Junior High School in the Division of Tagum City. This will lead the Grade 10 students to be the appropriate respondents where they can fully relate to the following concerns of the study. There are 317 Grade 10 students composed of males and females for the school year 2020-2021. Through Slovin's sampling technique, a sample of 200 respondents will be randomly selected to form part of the study.

In this research, the participants will be identified based on the following selection criteria: 1) Grade 10 students from a Junior High School in the Division of Tagum City and 2) have been enrolled in the school year 2020-2021. The conduct of the study will be from December 2020-March 2021. Table 1 shows the distribution of the respondents.

Grade 10	Population	Sample
Male	157	100
Female	160	100

2.4 Data Gathering Procedure

In collecting the data of the study, the researcher will observe safety protocols set by the Inter-Agency Task Force (IATFA) during this pandemic. An endorsement letter will be obtained from the Dean of Graduate Studies of University of Mindanao for the conduct of the study intended to the identified learning institutions. Also, the researcher will ask the permission of the Schools Division Superintendent of Tagum City to conduct the study. Upon its approval of the request letter, a formal communication shall be forwarded to the principal of the school concerned to administer the questionnaire of the study conducted.

After the approval and arrangement of the schedule, the researcher shall distribute the questionnaires to the targeted respondents. The results of the study shall be collected, tabulated, and computed utilizing various scales and subjected to statistical analysis then analyzed and interpreted the statistical results of the

data, drawn conclusions, formulated recommendations based on the findings of the study.

Statistical Tools

The data gathered through the questionnaires will be tallied and treated using the following statistical tools:

Mean. This will be used to determine the level of classroom climate of teachers and the high-quality teaching-learning practices

Pearson-r. This test will be used to determine the significant relationship between the level of classroom climate of teachers and the high-quality teaching-learning practices

Regression. This test will be used to determine the significant influence of classroom climate of teachers and the high-quality teaching-learning practices.

References should be added at the end of the paper, and its corresponding citation will be added in the order of their appearance in the text. Authors should ensure that every reference in the text appears in the list of references and vice versa. Indicate references by Clark et al., 1962 or Deal and Grove, 2009 or Fachinger, 2006 in the text. The actual authors can be referred to, but the reference citation(s) must always be given.

Some examples of how your references should be listed are given at the end of this template in the 'References' section, which will allow you to assemble your reference list according to the correct format and font size.

2.5 Data Analysis

The researcher used adapted and modified questionnaires as an inquiry device which gained widespread acceptance as a practical way of eliciting data to answer specific problems in this research. This was validated by the panel members and each item underwent validation of external validators. These include the following: for the independent variable is the Classroom Climate Inventory Barr (2016) which will look into the level of classroom climate and the high quality of learning practices questionnaire of Macgregor(2017).

To evaluate the independent variable, which is the classroom climate of students, a 5-point rating scale rating ranging from never (1) to very high (5) will be utilized. The questionnaire on the independent variable will be the second part of the instrument. This is composed of thirty (30) items with five (5) items per indicator. The respondents will be asked to rate themselves according to the level with which they agreed on the items. Through this, the researcher will arrive at a definite interpretation using a hypothetical range of means as follows:

Range of Mean	Descriptive Equivalent	Interpretation
4.20-5.00	Very High	This means that the classroom climate inventory is very much observed.
3.40-4.19	High	This means that the classroom climate inventory is much observed.
1.80-2.59	Low	This means that the classroom climate inventory is moderately observed.
1.00-1.79	Very Low	This means that the classroom climate inventory is not observed.

Meanwhile, for the dependent variable, the indicators are high quality learning practices in terms of designing effective, standard -based instruction; delivering high quality -student centered instruction; promoting high levels of student engagement; using assessment for student-learning; using positive behavior

management strategy; having clear evidence that students are learning.

For the parameter of limits, the following are used:

Range of Mean	Descriptive Equivalent	Interpretation
4.20-5.00	Very High	This means that the high-quality learning practices is very much observed.
3.40-4.19	High	This means that the high-quality learning practices is much observed.
1.80-2.59	Low	This means that the high-quality learning practices is moderately observed.
1.00-1.79	Very Low	This means that the high-quality learning practices is not observed.

The questionnaires will undergo validation from four validators. Validators will be consulted to verify and check the content validity of the questionnaire that will be used in this study. Upon permission, the researcher will conduct a pilot test to a set of Grade 10 students not covered in the study's sample population. This will be done to ensure the reliability of the questionnaire through the identification of its Cronbach's alpha. Reliability will also be addressed through pilot-testing where the Cronbach alpha value for the independent variable and the dependent variable. all values must be greater than 0.70, for the instruments to be administered.

3. Results and Discussion

3.1 Level of Classroom Climate Inventory of Junior High School Students

Indicators	Mean	SD	Descriptive Equivalent
Personalization	4.20	0.60	Very high
Involvement	4.17	0.62	High
Student cohesiveness	4.25	0.66	Very high
Satisfaction	4.31	0.68	Very high
Task orientation	4.21	0.64	Very high
Innovation	4.13	0.62	High
Individualization	4.05	0.65	High
Overall	4.19	0.54	Very high

The overall mean scores were calculated from the maximum to lowest quantified mean scores: 4.31 or interpreted as very high for satisfaction with a standard deviation of 0.68; 4.25 or interpreted as very high for student cohesiveness with a standard deviation of 0.66 ; 4.21 or interpreted as very high for task orientation with a standard deviation of 0.64; 4.20 or interpreted as very high for personalization with a standard deviation of 0.60.; 4.17 or interpreted as high for involvement with a standard deviation of 0.62; 4.13 or interpreted as high for innovation with a standard deviation of 0.62; last, 4.05 or interpreted as high for individualization with a standard deviation of 0.65.

3.2 Level of High-Quality Learning Practices of Junior High School Students

Indicators	Mean	SD	Descriptive Equivalent
Designing effective, standards-based instruction	4.28	0.59	Very High
Delivering high quality -student-centered instruction	4.17	0.65	High
Promoting high levels of student engagement	4.21	0.66	Very high
Using assessment for student learning	4.20	0.66	Very high
Using positive behavior management strategy	4.33	0.58	Very High
Having clear evidence that students are learning	4.18	0.65	Very High
Overall	4.23	0.57	Very high

The overall mean score was calculated from the maximum to lowest quantified mean scores: 4.33 or interpreted as very high for using positive behavior management strategy with a standard deviation of 0.58; 4.28 or interpreted as very high for designing effective, standards-based instruction with a standard deviation of 0.59; 4.21 or interpreted as very high for promoting high levels of student engagement with a standard deviation of 0.66; 4.20 or interpreted as very high for using assessment for student learning with a standard deviation of 0.66; 4.18 or interpreted as very high for having clear evidence that students are learning with a standard deviation of 0.65; last, 4.17 or interpreted as high for delivering high quality -student-centered instruction with a standard deviation of 0.65.

3.3 Significant Relationship between Classroom Climate Inventory and High-Quality Learning Practices among Junior High School Students

Independent Variables	Dependent Variables	r- value	r- squared	p - value	Decision
Classroom Climate Inventory	High-Quality Learning Practices	0.839*	0.7039	0.001	H ₀ is rejected.

*Significant at 0.05 level of significance

The findings revealed that the independent variables, namely: personalization; involvement; student cohesiveness; satisfaction; task orientation; innovation; individualization are significantly related to high-quality learning practices of Junior High School students. The R-value is 0.839, with a p-value of 0.001 and a

coefficient of determination of 0.7039, indicating a positive correlation.

In addition, as shown in the table, the hypothesis that there is no significant relationship between classroom climate inventory and High-quality learning practices of Junior High School students were rejected. Therefore, there was a significant relationship between the Classroom Climate Inventory and High-Quality learning practices.

3.4 Regression Analysis on the Influence of the Domains of Classroom Climate Inventory and High-Quality Learning Practices among Junior High School Students

Independent variables	Unstandardized Coefficients		Standardized Coefficients Beta	t - value	p - value	Decision
	B	SE (B)				
Constant	0.578	0.148				
Personalization	-0.032	0.045	0.034*	-0.709	0.979	H ₀ is not rejected.
Involvement	-0.006	0.057	-0.066	-0.098	0.922	H ₀ is not rejected.
Student Cohesiveness	0.081	0.048	0.093	1.668	0.097	H ₀ is not rejected.
Satisfaction	0.121	0.040	0.145*	3.028	0.003*	H ₀ is rejected.
Task Orientation	0.051	0.057	0.058	0.902	0.368	H ₀ is not rejected.
Innovation	0.261	0.050	0.285*	5.264	0.001*	H ₀ is rejected.
Individualization	0.407	0.047	0.468*	8.624	0.001*	H ₀ is rejected.
Dependent variable: High-Quality Learning Practice						
R= 0.894 R-squared= 0.799						
F-ratio= 99.47 P-value = 0.001						

The results showed that the classroom climate inventory and high-quality learning practices among junior high school students is statistically insignificant. Furthermore, the result showed that personalization, involvement, student cohesiveness, satisfaction, task orientation, innovation and individualization were the domains of classroom climate inventory that insignificantly influence the high-quality learning practices, since they all got a p-value which is greater than the significance level at 0.05.

4. Conclusion

Based on finding of the study, the following conclusions are drawn on the same degree of classroom climate inventory of Junior high school students is very high, specifically satisfaction, student cohesiveness, task orientation and personalization. Further, it was high for involvement, innovation, and individualization. The overall level of high-quality learning practices of Junior High School students is very high.

Furthermore, there is a high positive significant relationship between classroom climate inventory and school high-quality learning practices particularly in Using positive behavior management strategy, designing effective, standards-based instruction, promoting high levels of student engagement, using assessment for student learning, having clear evidence that students are learning. And it was High for delivering high quality student-centered.

This means that the domain of classroom climate inventory significantly influences high-quality learning practices. Among the domain of classroom climate inventory, it was found out that individualization best predicts high-quality learning practices.

5. Recommendation

After a thorough review and suggestion of the implications of the study's results and conclusions, the researcher recommends the following:

There should be an improvement in designing a learning task that is engaging to the learner's skills and capabilities. Thus, the individuality of students independent learning task will be shown while demonstrating concern for the students' well-being.

Teachers will come up with differentiated strategies in creating lesson task to the diverse learners that will focus more to what they are interested. They must recognize their role of cultivating a favorable learning climate that is conducive for learning, one way to improve is through conducting seminars for the teachers, in school base it could be a SLAC session, trainings from expert speakers in their field. Thus, teachers must support and practice quality assurance that ensure quality learning through techniques, processes, and workflow to ensure that a product or course meets prescribed standards of excellence.

Meanwhile, it was found out that the level of high-quality learning practices of Junior high school students is very high. The lowest mean was delivering high quality-student centered instruction. The researcher therefore recommends to the teachers may promote student-centered learning by allowing students to participate in decision-making, believing in their abilities, and recognizing how it feels to learn.

Further, teachers in collaboration with school administrators, strive to establish an environment that is suited to each student's unique learning needs, encouraging students to be more self-directed and in charge of their own education. This is also a strategy to aligning all components of a school community (curriculum, staffing, finances, technology, facilities, timetables, community relationships, and so on) in a way that focuses on the desired goals for each individual student while accounting for their diversity.

And to the Department of Education (DepEd) will create more policies and guidelines to add into the repertoire of effective strategies improve classroom climate inventory and to handle each student appropriately and have a better grasp their way of teaching strategies and practices. Finally, it will give the future researchers a place to start when broadening the range of variables to be addressed in the research.

Moreover, since there is a significant correlation between classroom climate inventory and high-quality learning practices among Junior High School students. And to address the need of the students, the researcher recommends further study be made on the variables connected to these pertinent correlations.

References

- Abdulla, N. (2018). Effectiveness of Assessment for Learning: Teachers' Perception. https://www.researchgate.net/profile/NajmaAbdulla/publication/336408812_pdf
- Abla, C., & Fraumeni, B. R. (2018). Student Engagement: Evidence-Based Strategies to Boost Academic and Social-Emotional Results. <https://files.eric.ed.gov/fulltext/ED600576.pdf>
- Andersen, K. N. (2019). Assessing task-orientation potential in primary science textbooks: Toward a new approach. *Journal of Research in Science Teaching*, 57(4), 481-509. <https://doi.org/10.1002/tea.21599>
- Anteza, T.K. (2020). Management of a conducive classroom environment: A meta-synthesis. *Journal of Education and Practice*, 11(2020), 55-67. <https://doi.org/10.7176/jep/11-26-06>
- Barksdale, C., Peters, M. L., & Corrales, A. (2019). Middle school students' perceptions of classroom climate and its relationship to achievement. *Educational Studies*, 47(1), 84-107. <https://doi.org/10.1080/03055698.2019.1664411>
- Barr, J. J. (2019). Developing a Positive Classroom Climate, The IDEA Center, IDEA paper #61, <https://files.eric.ed.gov/fulltext/ED573643.pdf>
- Bartolomé, A., Castañeda, L., & Adell, J. (2018). Personalisation in educational technology: The absence of underlying pedagogies. *International Journal of Educational Technology in Higher Education*, 15(1). <https://doi.org/10.1186/s41239-018-0095-0>
- Bauleke, Kristina and Momany, Rebecca. (2019). A Study of Personalized Learning and its Impact on Middle School Teachers and Students. Retrieved from Sophia, the St. Catherine University repository website: <https://sophia.stkate.edu/maed/329>
- Bowden, R. (2008). Linking premise to practice: An instructional theory-strategy model approach. *Journal of College Teaching & Learning (TLC)*, 5(3). <https://doi.org/10.19030/tlc.v5i3.1305>
- Cardichon, J., Roc, M., & Bishop, J. (2014). Climate change: Improving school climate by supporting great teaching. Retrieved from <https://all4ed.org/wp-content/uploads/2014/09/HSClimate4.pdf>
- Chand, K. (1993). Managing and Improving the Education of Students At-Risk. 4-30. <file:///C:/Users/user/Documents/Reference/THEORY/ED360434.pdf>
- Costa, P. & Araújo, L., Quality of Teaching and Learning in Science, EUR 28865 EN, Publications Office of the European Union, Luxembourg, 2018, ISBN 978-92-79-76294-9, doi:10.2760/860512, JRC109064.
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2019). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97-140. <https://doi.org/10.1080/10888691.2018.1537791>
- De Lange, T., & Wittek, L. (2018). Creating shared spaces: Developing teaching through peer supervision groups. *Mind, Culture, and Activity*, 25(4), 324-339. <https://doi.org/10.1080/10749039.2018.1544645>
- Dimic, D., & Randelović, D. (2019). Connection between classroom climate and academic performance. [https://doi.org/CONNECTION BETWEEN CLASSROOM CLIMATE AND ACADEMIC PERFORMANCE](https://doi.org/CONNECTION%20BETWEEN%20CLASSROOM%20CLIMATE%20AND%20ACADEMIC%20PERFORMANCE)
- Ebede, S. S. (2018). Student engagement in higher education: measuring the differences in community engagement. <https://scholarworks.uni.edu/cgi/viewcontent.cgi?article=1939&context=etd>
- Frechette, A. (2017). "The Impact Of A Standards-Based Approach On Student Motivation". 141. <https://dune.une.edu/theses/141>
- Goldenberg, J., & Klavir, K. (2018). School Climate, Classroom Climate, and Teaching Quality: Can Excellent Students Unravel this Connection? <https://files.eric.ed.gov/fulltext/EJ1301500.pdf>
- Goldenberg, J., & Klavir, R. (2017). School Climate, Classroom Climate, and Teaching Quality: Can

- Excellent Students Unravel this Connection? 121-139. https://doi.org/10.4324/9780203464281_chapter_6
- Hachfeld, A., Lazarides, R. The relation between teacher self-reported individualization and student-perceived teaching quality in linguistically heterogeneous classes: an exploratory study. *Eur J Psychol Educ* **36**, 1159–1179 (2021). <https://doi.org/10.1007/s10212-020-00501-5>
- Hadiyanto, H., Syahril, S., Arwidayanto, A., & Sumar, W. T. (2019). Development of University classroom climate inventory. Proceedings of the International Conference on Educational Sciences and Teacher Profession (ICETeP 2018). <https://doi.org/10.2991/icetep-18.2019.81>
- Hadiyanto, H., Syahril, S., Arwidayanto, A., & Sumar, W. T. (2019). Development of University classroom climate inventory. Proceedings of the International Conference on Educational Sciences and Teacher Profession (ICETeP 2018). <https://doi.org/10.2991/icetep-18.2019.81>
- Hassem, H. M. (2018). The impact of student-centered instruction on EFL learners' affect and achievement. *English Language Teaching*, 12(1), 134. <https://doi.org/10.5539/elt.v12n1p134>
- Hughey, J. (2020). Individual personalized learning. *Educational Considerations*, 46(2). <https://doi.org/10.4148/0146-9282.2237>
- Karpenko, O. M., Lukyanova, A. V., Bugai, V. V., & Shchedrova, I. A. (2019). Individualization of learning: An investigation on educational technologies. *Journal of History Culture and Art Research*, 8(3), 81. doi:10.7596/taksad.v8i3.2243
- Khaliq, F., Zaman, A., & Ghafar, A. (2018). Teachers' Emotional Social Intelligence and its Relationship with Students' Cohesiveness in Classroom Learning Environment. *Global Social Sciences Review*, III(I), 160–175. [https://doi.org/10.31703/gssr.2018\(iii-i\).11](https://doi.org/10.31703/gssr.2018(iii-i).11)
- Konold, T., Cornell, D., Jia, Y., & Malone, M. (2018). School climate, student engagement, and academic achievement: A latent variable, multilevel multi-informant examination. *AERA Open*, 4(4), 233285841881566. <https://doi.org/10.1177/2332858418815661>
- Lewin, K. (1993). Education and Development: The Issues and the Evidence. Education Research. Serial No. 6. INSTITUTION Overseas Development Administration, London. file:///C:/Users/user/Documents/Reference/THEORY/ED400385.pdf, 11-28.
- Liem, G. A., & Chong, W. H. (2017). Fostering student engagement in schools: International best practices. *School Psychology International*, 38(2), 121-130. <https://doi.org/10.1177/0143034317702947>
- MacGregor, R.R. (2017). The essential practices of high quality teaching and learning. The Center for Educational Effectiveness. https://meyda.education.il.QualityTeaching/essential_practices.
- MacGregor, R. R. (2017). The Essential Practices of High Quality Teaching and Learning. 5-30 file:///C:/Users/user/Documents/Reference/THEORY/essential_practices.pdf
- Majeed, A., & Umar, A.T. (2018). The impact of assessment for learning on students' achievement, 15-24. 11(2), 15. <https://doi.org/10.5539/elt.v11n2p15>
- Malacapay, M. C. (2018). Teacher's performance in relation to pupils academic achievement in Kabankalan city. *JPAIR Multidisciplinary Research*, 34(1), 72-88. <https://doi.org/10.7719/jpair.v34i1.630>
- Malik*, M. H., & Rizvi, A. A. (2018). Effect of Classroom Learning Environment on Students' Academic Achievement in Mathematics at Secondary Level. <https://files.eric.ed.gov/fulltext/EJ1209817.pdf>
- Masters, G. N. (2018, August 13). The role of evidence in teaching and learning [Paper presentation]. Research Conference 2018 - Teaching practices that make a difference: Insights from research. https://research.acer.edu.au/research_conference/RC2018/13august/2
- Mithans, M. M., & Ivanuš Grmek, M. B. (2020). Relationships between student participation in the classroom and the classroom climate. *Методички видици*, 11(11), 217. <https://doi.org/10.19090/mv.2020.11.217-232>
- Momany, R., & Bauleke, K. (2019). A study of Personalized Learning and its impact on MiddleSchoolTeachersandstudents. <https://sophia.stkate.edu/cgi/viewcontent.cgi?article=1330&context=>
- Mundir, A., Baharun, H., Soniya, S., & Hamimah, S. (2022). Childhood behavior management strategy based on fun learning environment. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(4), 25832595. <https://doi.org/10.31004/obsesi.v6i4.2063>

- O'RALLY, K. (1975). Classroom Climate and Achievement in Secondary School Mathematics Classes. file:///C:/Users/user/Documents/Reference/THEORY/ED101473.pdf
- OECD. (2013). PISA 2012 Assessment and Analytical Framework. OECD Publishing. https://www.oecd.org/pisa/pisaproducts/PISA%202012%20framework%20e-book_final.pdf
- Okoutsidou, M. (2019). Students' Satisfaction with Public Schools in Greece. <https://centerprode.com/conferences/3leCSHSS/coas.e-conf.03.28297o.pdf>
- Ovbiagbonhia, A. R., Kollöffel, B., & Brok, P. D. (2019). Educating for innovation: Students' perceptions of the learning environment and of their own innovation competence. *Learning Environments Research*, 22(3), 387-407. <https://doi.org/10.1007/s10984-019-09280-3>
- Page, A., & Jones, M. (2018). Rethinking teacher education for classroom behaviour management: Investigation of an alternative model using an online professional experience in an Australian University. *Australian Journal of Teacher Education*, 43(11), 84-104. <https://doi.org/10.14221/ajte.2018v43n11.5>
- Phuntsho, U., & Dhendup, R. (2020). The relationship between school climate, student engagement, and academic achievement in higher secondary school. file:///C:/Users/user/Downloads/BJRDAutumn2020.PDF.pdf
- SCHWEIG, J., HAMILTON, L. S., & BAKER, G. (2019). School and Classroom Climate Measures. https://www.rand.org/content/dam/rand/pubs/research_reports/RR4200/RR4259/RAND_RR4259.pdf
- Sekar, J.J.(2019). Effective learning and quality teaching. SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3486348>
- Singh, P., Allen, J., & Rowan, L. (2019). Quality teaching: Standards, professionalism, practices. *Asia-Pacific Journal of Teacher Education*, 47(1), 1-4. <https://doi.org/10.1080/1359866x.2019.1557925>
- Sink, C., & Spencer, L. (2005). My class inventory-short form as an accountability tool for elementary school counselors to measure classroom climate. *Professional School Counseling*, 9(1), 374-8. <https://doi.org/10.5330/prsc.9.1.y720844684111402>
- Sithole, N.(2017). Promoting a positive learning environment: school setting investigation. 2-8 file:///C:/Users/user/Documents/Reference/.pdf
- Suamuang, W., & Suksakulchai, S. (2020). Perfection of learning environments among high, average and low academic achieving students. *The New Educational Review*, 61(3), 76-86. <https://doi.org/10.15804/tner.20.61.3.06>
- Surr, W., Zeiser, K., Briggs, O., & Kendziora, K. (2018). A Study Exploring the Relationship Between Collaboration, Personalization, and Equity. <http://files.eric.ed.gov/fulltext/ED592089>.
- Tetzlaff, L., Schmiedek, F., & Brod, G. (2020). Developing personalized education: A dynamic framework. *Educational Psychology Review*, 33(3), 863-882. <https://doi.org/10.1007/s10648-020-09570-w>
- Tuazon, A. P. (2017). Climate for innovation in support of skill-development instructions in higher education. *Liceo Journal of Higher Education Research*, 13(1). <https://doi.org/10.7828/ljher.v13i1.1014>
- Vermunt, J. D., & Donche, V. (2017). A learning patterns perspective on student learning in higher education: State of the art and moving forward. *Educational Psychology Review*, 29(2), 269-299. <https://doi.org/10.1007/s10648-017-9414-6>
- Vidić, T. (2021). Students' school satisfaction: The role of classroom climate, self-efficacy, and engagement. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 9(3), 347-357. <https://doi.org/10.23947/2334-8496-2021-9-3-347-357>
- Weerasinghe, IMS and Fernando, R. Lalitha, Students' Satisfaction in Higher Education (May 28, 2017). *American Journal of Educational Research*, Vol. 5, No. 5, p. 533-539, 2017, Available at SSRN: <https://ssrn.com/abstract=2976013>