

## *Classroom Climate: Implications to Students' Academic Achievement*

Alexander F. Suan, Lourdes College, The Philippines

The Asian Conference on Education 2016  
Official Conference Proceedings

### **Abstract**

This descriptive-correlational study determined the relationship between classroom climate and student's academic achievement measured in terms of their general average grade in all general education subjects. Purposively sampled students from the different programs of Lourdes College participated in the study. Data were gathered using a questionnaire subjected to exploratory factor analysis to establish its validity and reliability. The data were processed using descriptive and inferential statistics. Findings reveal that the classroom climate of the school was perceived to be highly conducive to learning. Generally, the students had a good academic achievement. Statistical results indicate a significant relationship between classroom climate and students' academic achievement. That is, classroom climate greatly contributes to the academic success of students. Therefore, the school should continue providing students with favorable learning environment with emphasis on differentiation.

Keywords: Classroom climate, academic achievement, physiological climate, physical climate,

**iafor**

The International Academic Forum  
[www.iafor.org](http://www.iafor.org)

## **Introduction**

Learning can take place everywhere. However, the classroom still remains to be the main learning environment in school. It is a place where teachers and students interact intellectually, emotionally, and socially using a variety of tools, information, and resources in the pursuit of knowledge. Hence, it is very important for teachers to create a positive classroom climate that truly promotes learning (Falsario et.al., 2014; Bilbao et al., 2012).

The nature of the classroom environment and psychosocial interactions can make a difference on how students learn and achieve their goals (McRobbie et.al.,1993). A classroom that radiates an effective learning environment makes learners acquire more positive attitudes and basic skills that can be applied throughout their lives (Acero et al., 2015). Thus, quality classroom climate must be in place to influence learning positively.

Lourdes College, among the many schools in Cagayan de Oro City that provide quality education, makes it a priority the creation of a classroom climate that facilitates meaningful learning among students. However, if such climate has facilitated learning remains to be seen, hence the need to conduct this study. Results of this study may lead to the identification of interventions that will further enhance classroom climate.

## **Framework**

This study is anchored on the Environmentalist Learning Theory by Albert Bandura (1986) and Lipoff (2011) with postulates that the environment shapes learner's behavior and learning and cultivates the minds of the students, as they interact with their surroundings. When environment encourages greater learning, the educational opportunities increase.

Ekpo (2009) cited Strivens' view that the effectiveness of classroom climate depends on its physical appearance, one which provides students with a task – oriented atmosphere and encourages social and emotional needs. This view implies that the classroom is the best venue for students to attain their full potentials academically. Teachers should continually strive to create a positive classroom climate in which student learning is maximized (Bilbo et al., 2012). Positive climate allows students to meet their basic needs whether physical, emotional or academic.

According to Fisher (2008), physical environment can affect students' comfort and also their ability to learn to some extent. Students who are comfortable are likely to get much information as compared to those who are uncomfortable. Besides, the physical atmosphere can also affect the morale of the learners. Unfavorable classroom environment can discourage the learners and they become less willing to learn ([www.enotes.com](http://www.enotes.com)). Physical environment plays a central role in any activity.

Classroom climate is a phenomenon consisting of interacting variables that influence learning. Samrat (2015) categorized classroom climate into the physical and physiological dimensions. This study focuses on the physiological climate. The

nature of the psychosocial interactions in the classroom can make a difference on how students learn and achieve their goals (McRobbie, et al, 1993)

Fraser (1990) pointed out the dimensions of classroom environment, namely cohesiveness, teacher support, involvement, task orientation, investigation, cooperation, equity, differentiation, computer usage, and young adult ethos. Nevertheless, among these dimensions, only teacher support, differentiation, cooperation, and teacher - student interaction were given emphasis in this present study.

Teacher support refers to the services and the trust extended to the students. Ryan and Deci (2000) noted that it is important for a classroom environment to provide optimal challenges for learning, where students feel that their teachers respect them, care about them, and provide support for their autonomy. Differentiation is the extent to which the teachers cater to students differently on the basis of ability, rates of learning, and interest. Cooperation refers to the extent to which students cooperate rather than compete with one another on learning tasks. Hannah (2013) emphasized in her study that teachers should create an atmosphere where students can work collaboratively and free to express their views without fear of judgment. Lastly, teacher - student interaction is the involvement of a student in discussion, performance in assigned tasks, and enjoyment in the class. Gammage (1982) wrote that teacher – student interaction during a lesson involves a consistent flow of information concerning their perceptions, expectations, attitudes and feelings about each other and the learning activities at hand.

Figure1 shows the framework of this study.

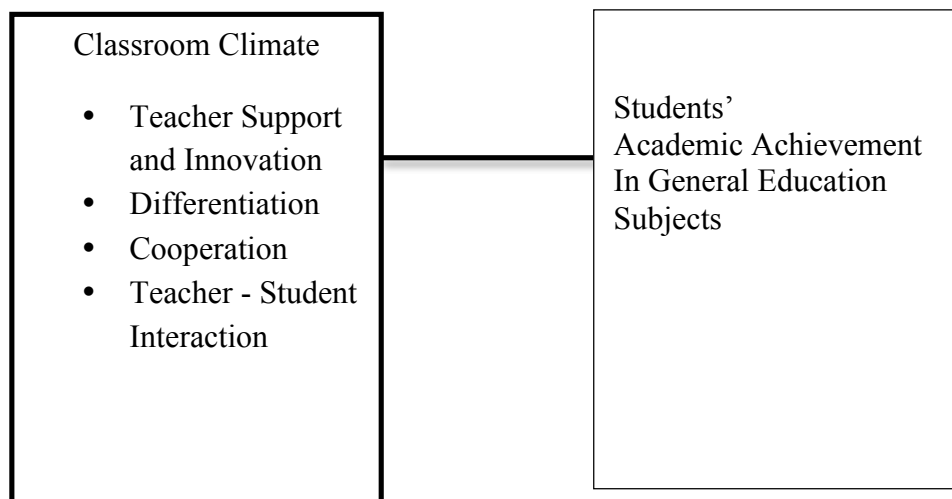


Figure1. Conceptual schema of the study

## Objective of the Study

The school where this study is conducted provides quality education, and emphasizes the creation of a classroom climate that facilitates meaningful learning among students. However, whether such climate has indeed facilitated learning remains to be seen, hence the need to conduct this study. This study explored the quality of classroom climate in relation to the academic performance of college students of a private school in Cagayan de Oro City, Philippines during the Academic Year 2014-2015. Specifically, the study determined the 1) students' assessment of the quality of classroom climate, 2) the students' academic achievement; and 3) the relationship between these two variables.

## Methods

This study used the descriptive – correlational research design. Five hundred students from different programs enrolled during the Academic Year 2014 – 2015 participated in the study. It used purposive sampling with the inclusive criterion of those who were enrolled in General Education subjects and grouped by discipline namely Humanities, Language, Social Sciences and Sciences. Data on classroom climate were gathered using the instrument of Fraser (1990), namely My Class Inventory (MCI), which was adapted and subjected to exploratory factor analysis to fit the Philippine setting. Descriptive and inferential statistics were used to organize the data.

## Results and Discussion

On the quality of classroom climate, Table 1 shows that the participants rated the teacher support and innovation, cooperation, and teacher – student interaction as very highly evident; and differentiation as only highly evident. The overall mean of 3.52 indicates that the observance of a conducive classroom climate is very highly evident.

**Table 1. Mean Distribution of Students' Assessment of Classroom Climate Factors**

<b>Classroom Climate Factors</b>	<b>M</b>	<b>SD</b>	<b>Description</b>
Teacher's support and Innovation	3.81	0.32	Very Highly Evident
Differentiation	3.26	0.50	Highly Evident
Cooperation	3.52	0.48	Very Highly Evident
Teacher - Student Interaction	3.51	0.56	Very Highly Evident
<b>Overall</b>	<b>3.52</b>	<b>0.47</b>	<b>Very Highly Evident</b>

Legend: 3.51 – 4.0 (Very highly evident)

2.51 – 3.50 (Highly evident)

1.51 – 2.50 (Slightly evident)

1.0 – 1.50 (Not evident)

Moreover, the table shows that the school climate factor with the highest mean is the teacher's support and innovation (M=3.81), which indicates that the instructors go out of their way to help them when they have problems with their work, and that they promote a caring, kind, and considerate relationship with their students. In factor differentiation, the participants indicated that their teachers employ varied learning activities; however, this indicator obtained the lowest mean (3.26). As to the participants' academic achievement, Table 2 reveals that generally a number of the participants manifested good (22.8%) and satisfactory (21%) academic achievement.

**Table 2. Frequency and Percentage Distribution of the Students' Academic Achievement**

Final Grade	Frequency	Percentage (%)	Description
1.0-1.24	10	2.0	Outstanding
1.25-1.49	40	8.0	Superior
1.50-1.74	90	18.0	Very Good
1.75-1.99	114	22.8	Good
2.0-2.24	105	21.0	Satisfactory
2.25-2.49	45	9.0	Slightly Satisfactory
2.5-2.74	50	10.0	Acceptable
2.75-2.99	35	7.0	Fair
3.0-3.49	6	1.2	Marginal
3.5-4.99	0	0.0	Conditional
5.0	5	1.0	Failed
Overall	500	100.0	

Table 3 shows the test of relationship between classroom climate and academic achievements using Pearson Product Moment Correlation coefficients. Results show that the components of classroom climate were significantly associated with their academic achievement except differentiation. This finding is in consonance with what Serviñas (2013) explained that an environment with positive climate characterized by harmonious relationship aids students to engage academically. Classrooms conducive to learning cater to the needs and interests of students, encourage creative thinking and eventually promote their academic achievement.

**Table 3. Correlation of Classroom Climate and Students' Academic Achievement**

Classroom Climate Academic Achievement	Pearson Correlation r	Correlation Coefficient	p - value	Remarks
Teacher's support and Innovation	-.142**	0.020	.003	Significant
Differentiation	.037	0.001	.412	Not Significant
Cooperation	-.141**	0.019	.002	Significant
Teacher – Student Interaction	-.119**	0.014	.008	Significant
Overall	-.095**	0.009	.034	Significant

\*\* . Correlation is significant at the 0.05 level (2-tailed)

Differentiation was found to show no significant relationship with students' academic achievement. This finding is in line with what Marshall et.al. (2005) asserted that a caring relationship between teachers and students fosters a desire to learn among students.

## **Conclusion**

The students in this school assessed the classroom climate of the school to be highly conducive to learning. That is, they experienced a nurturing and learning environment, which led them to perform well in class. Findings of this study provide evidence of the significant relationship between classroom climate and students' academic achievement. That is, classroom climate greatly contributes to the academic success of students. Moreover, a positive classroom climate effectuates meaningful learning that enables students to succeed in school. Therefore, it is important for the school to continue providing a favorable learning environment to the students, specifically on differentiation, by designing challenging activities tailored-fit to the students' needs, interest, and phases of learning.

## References

Acero, V.O., Javier, E.J., and Castro, H.O. (2015). Principles of Teaching 1. Manila: Rex Bookstore Inc

Bandura, A. (1986). Social Foundation of Thought and Action: A social cognitive theory. Englewood Cliffs, New Jersey: Prentice Hall

Bello, A. (2012) University, Zaria, Nigeria muritalaakanb@ymail.com

Bilbao, e.al. (2012). The Teaching Profession. Metro Manila: Lorimar Publishing Co., Inc

Ekpo, K. (2009). Classroom Climate and Students' Academic Achievement in Social Studies in Cross River, Vol.3., No.1, 413 - 428

Falsario, H.N., Muyong, R.F. and Nuevaespana, J.S. (2014). Classroom Climate and Academic Performance of Education Students. Southern Iloilo Polytechnic College

Fisher, E. S. (2008). The Effect of the Physical Classroom Environment on Literacy Outcomes: How 3<sup>rd</sup> Class Teachers use the Physical Classroom to Implement a Balanced Literacy Curriculum. A Thesis of the Faculty of the Graduate School University of Missouri

Fraser, B.J. (1990). Individualized Classroom Environment Questionnaire. Melbourne, Australia Council for Educational Research

Gammage, P. (1982). Children and Schooling: issues in childhood socialization. London: George Allen and Unwin.

Hannah, R. (2013). The Effect of Classroom Environment on Student Learning. Western Michigan University

Lipoff, S. (2011). Environmental learning theory: stuff vs. your child. Retrieved <http://sarahlipoff.com/2011/2015/environmental-learning-theory-stuff-vs-your-child/>

McRobbie, C.J. and Fraser, B.J. (1993) A typology of science laboratory classroom environments. Paper presented at the annual meeting of the American Educational Research Association, Atlanta

Marshall et.al. (2005). The relation Between School Culture and State Assessment Results in Communications Arts and Math. Retrieved on July

Ryan, R.M. & Deci, E.L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. Contemporary Educational Psychology, Vol.25, No.1, 54 - 67

Samrat,B.(2015). Classroom Climate and Academic Performance of Higher Secondary Students,Vol.4, Issue 7, Abhinav Publication  
12, 2012 from <http://showcharecter.com/School Culture State TestResults.pdf>

Serviñas,M.(2013). School Climate Factors and Mathematics Performance of Intermediate Pupils,Vol.26, No.1, 184 – 198

Strivens, J. (1985). Social climate: A review of a problematic concept. In D. Reynolds (Ed.), *Studying school effectiveness* (pp 79 – 86). Lewes: Falmer Press.