

Exploring Classroom Climate Factors for Technical Education in the SEAMEO Country Region

Summary

Classroom climate is the standard, norm, beliefs, and rituals that teachers and students can feel and do academic activities (Wheelock, 2005). Classroom climate encompasses the aspects of teachers' behaviors, teaching methods, disciplinary enforcement, and interaction between teachers and students (Djigic & Stojiljkovic, 2011). Classroom climate is the environment requiring teachers and students to communicate each other by discussing, writing, speaking, making gestures, and explaining in a mutually respected way (Martin & Dowson, 2009; Erdogan & Kurt, 2015). The main elements of classroom climate are students, teachers, their relationships, teachers' classroom management styles, activities and interaction, and classroom norms (Mithans & Grmek, 2020). The interactions among teachers and students within the classroom and their engagements in the lesson plans developing an individual sense of collective community create classroom climate (Barr, 2016). Classroom climate might be one of the indicators measuring the school success and quality service deliveries (Petrík, 2019). The positive classroom climate is based on mutual respect, caring, appreciation, and consultation among teachers and students (McLeod, Fisher, & Hoover, 2003). Thus, positive classroom climate is shaped by productive interactions between teachers and students within the classroom with effective communication, cooperative learning, and mutual supports (Huang, 2021).

Introduction

Positive classroom climate promotes learning processes and developing students' thinking skills (Khalfaoui, García-Carrión, & Villardón-Gallego, 2021). Positive classroom climate requires active interaction and communication between teachers and students within the classroom following teachers' instructions and guidelines (Ginner, Ferrer-Wreder, & Allodi, 2021).

The climate can change students' mindset gradually pushing up social, emotional and academic development (Rucinski, Brown, & Downer, 2018). Positive classroom climate also motivates students learning enabling them to actively engage in the class activities (Lerdpornkulrat, Koul, & Poondej, 2018). Therefore, classrooms with strict disciplinaries affects students' self-efficacy resulting in a reduction of students' achievement gap (Cheema & Kitsantas, 2014).



Research Review

Findings highlight the results of data analysis. Among the 11 SEAMEO country members, 362 (42.3%) participants as technical students are from Singapore, followed by 244 (28.5%) from Cambodia and 219 (25.6%) from Viet Nam. Male participants account for 57.3%. Mostly participants age 17 (28%), followed by age 16 (17%) and age 18 (20.1%). For trades, 282 (33%) participants major in Mechanics /Electronics/Electricity /Manufacturing as 294 (34.4%) major in other fields. 521 (60.9%) participants are from polytechnic college as 303 (35.4%) participants are from Vocational and technical high schools. Finally, 372 (43.5%) participants are in grade 10 (year 1 at vocational and technical high schools) as 300 (35.1%) are in grade 11 (year 2).

As shown in Table 1, the eigenvalues of 60.15% explain the total variances for four factors.

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	21.241	49.398	49.398
2	1.788	4.158	53.556
3	1.757	4.085	57.641
4	1.079	2.508	60.150

Table 1. Total Variance Explained (N=855)

Grouped items integrated into grounded factors with inter-item correlation in magnitudes. Each factor was grounded following relevant empirical studies as shown in Table 2.

No.	Items	Grounded Factor	Inter-Item Correlation in Magnitude
1	My teachers put a lot of energy into teaching our class	Teachers' Effective Instructional Management (TIM)	60%
2	My teachers give me helpful comments about my work		
3	My teachers tell me when I make a mistake		
4	My teachers explain things clearly to me		
5	My teachers encourage me to improve my standard of work		
6	My teachers are inspiring to listen to		
7	My teachers are well-prepared		
8	My teachers show me how to do things when I am having difficulties		
9	My teachers keep control of my classes in a firm but pleasant way		
10	My teachers make me work hard		
11	My teachers praise me when I do well		
12	My teachers take time to help me when I have trouble with my work		
13	My teachers make the work we do in class interesting		
14	My teachers acknowledge me when I do well		
15	I feel I have much to be proud of		
16	On the whole I am satisfied with myself		
17	I feel I have a number of good qualities		

18	<i>I take a positive attitude towards myself</i>	Student Learning (SL)	58%
19	<i>I respect myself</i>		
20	<i>Learning in my school is fun</i>		
21	<i>I try very hard in school</i>		
22	<i>I enjoy the work I do at school</i>		
23	<i>I look forward to going to school</i>		
24	<i>I am accepted by others at this school</i>		
25	<i>I am keen to do extremely well at my school</i>		
26	<i>Doing well in my school is extremely important to me</i>		
27	<i>I get on well with others at my school</i>	Students' Interpersonal Skills (SIS)	62.9%
28	<i>I have not been deliberately hit or kicked by another student recently</i>		
29	<i>I have not been bullied at my school recently</i>		
30	<i>I have not been teased recently at my school</i>		
31	<i>Other students never spread rumors about me at my school</i>	Teachers' Professional Practices (TPP)	55.4%
32	<i>My teachers give me challenging work which I am expected to finish</i>		
33	<i>My teachers are easy to understand</i>		
34	<i>The work I do is well-organized</i>		
35	<i>My teachers expect high standards of work from me</i>		

Table 2. Grounded Factors with Inter-Item Correlation in Magnitude

Policy Recommendation

Reflecting from the results, some policy actions should be considered as follows:

- ✓ Diversities in the classroom context such as different instructional approaches, various classroom decoration and facilities, different instructional materials applied should be considered
- ✓ School-based management (SBM) courses should be enhanced by engaging teachers to clarify their resilient instructional roles and teach students independently
- ✓ Teacher exchange programs should be conducted regularly as part of a best-practice sharing forum among teachers
- ✓ Professional learning communities for teachers should be intensified under a clear guidance and advice from the management. Discussion topics should be, but not limited to, student work, teacher work, relevant empirical studies, instructional methods and subject matters.



References

- Barr, J. J. (2016). *Developing a positive classroom climate. IDEA Paper# 61. IDEA Center, Inc.*
- Cheema, J. R., & Kitsantas, A. (2014). Influences of disciplinary classroom climate on high school student self-efficacy and mathematics achievement: A look at gender and racial-ethnic differences. *International Journal of Science and Mathematics Education*, 12(5), 1261-1279.
- Djigic, G., & Stojiljkovic, S. (2011). Classroom management styles, classroom climate and school achievement. *Procedia-Social and Behavioral Sciences*, 29, 819-828.
- Erdogan, M., & Kurt, A. (2015). A review of research on classroom management in Turkey. *Procedia-Social and Behavioral Sciences*, 186, 9-14.
- Ginner-Hau, H., Ferrer-Wreder, L., & Allodi, M. W. (2021). Capitalizing on classroom climate to promote positive development. In *Handbook of Positive Youth Development* (pp. 375-386). Springer
- Huang, C. (2021). Research on the relationships among classroom climate, self-efficacy, and learning effectiveness. *Journal of Research in Business and Management*, 9(1), 16-21
- Khalfaoui, A., García-Carrión, R., & Villardón-Gallego, L. (2021). A systematic review of the literature on aspects affecting positive classroom climate in multicultural early childhood education. *Early Childhood Education Journal*, 49(1), 71-81.
- Lerdpornkulrat, T., Koul, R., & Poondej, C. (2018). Relationship between perceptions of classroom climate and institutional goal structures and student motivation, engagement and intention to persist in college. *Journal of Further and Higher Education*, 42(1), 102-115.
- Martin, A. J., & Dowson, M. (2009). Interpersonal relationships, motivation, engagement, and achievement: Yields for theory, current issues, and educational practice. *Review of Educational Research*, 79(1), 327-365
- McLeod, J., Fisher, J., & Hoover, G. (2003). *The key elements of classroom management: Managing time and space, student behavior, and instructional strategies.* Virginia: ASCD.
- Mithans, M., & Grmek, M. I. (2020). *The Use of textbooks in the teaching-learning process.* University of Maribor, Faculty of Education.
- Rucinski, C. L., Brown, J. L., & Downer, J. T. (2018). Teacher-child relationships, classroom climate, and children's social-emotional and academic development. *Journal of Educational Psychology*, 110(7), 992.
- Petrík, Š. (2019). Classroom climate and its importance in the teacher-pupil relationship. In *6th SWS International Scientific Conferences on Social Sciences 2019* (pp. 77-84).
- Wheelock, M. (2005). *Teacher assessment of school climate and its relationship to years of working with an elementary school administrator.* University of South Dakota.

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