IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Exploring The Role Of Educational Ecology In Fostering A Positive Classroom Climate

Apurva Sharma1* Dr. Dinesh Kumar2 **

1*Research Scholar, Department of Education, University of Lucknow

2**Professor, Head and Dean, Department of Education, University of Lucknow

ABSTRACT

This research paper explores the critical role of Educational Ecology in fostering a positive classroom climate, a vital component for effective teaching and learning. A positive classroom climate is characterized by supportive interactions among students and between teachers and students, which enhances student engagement, motivation, and overall academic success. The paper explores how various ecological factors—including physical environment, social dynamics, and institutional practices—interact to shape the emotional and social atmosphere of the classroom. Educational ecology refers to the intricate web of relationships and influences within educational settings that impact learning experiences. This includes not only the physical layout of the classroom but also the interpersonal relationships that develop among students and between students and teachers. Research has shown that a positive classroom climate leads to improved academic outcomes, reduced anxiety, and increased student satisfaction. For example, classrooms where teachers establish warm and inclusive relationships tend to foster higher levels of student participation and collaboration. The paper identifies several key dimensions of educational ecology that contribute to a positive classroom climate. These include personalization, where students feel recognized as individuals; involvement, which encourages active participation; and student cohesiveness, which promotes a sense of community among peers. Additionally, the role of clear communication, mutual respect, and shared expectations is emphasized as essential for creating an inclusive environment where all students feel valued. To cultivate a positive classroom climate, educators are encouraged to implement specific strategies that enhance educational ecology. These strategies include setting clear behavioral expectations, fostering open communication, and providing opportunities for collaborative learning. By actively engaging students in decision-making processes regarding classroom activities and norms, teachers can empower students, giving them a sense of ownership over their learning environment. Moreover,

this paper highlights the importance of adaptability in teaching practices. Educators must be attuned to the diverse needs of their students, including those with special educational needs (SEN). By organizing group work thoughtfully and rearranging seating arrangements to minimize cliques, teachers can create an atmosphere that supports inclusivity and belonging. In conclusion, this research underscores the significance of Educational Ecology in shaping a positive classroom climate. By recognizing the interconnectedness of various ecological factors and their influence on student interactions, educators can create nurturing environments that promote not only academic success but also social-emotional development. This conceptual framework serves as a guide for future research and practical applications aimed at enhancing classroom climates across diverse educational contexts.

Keywords: Educational Ecology, Classroom Climate, Inclusive relationships, Collaborative learning

INTRODUCTION

Educational ecology originated from the ecological study of human behavior. **Ashby, an American educator**, put forward the concept of "ecology of higher education" in 1966.Gremin, Dean of Columbia Normal College, proposed the term "educational ecology" in 1977, defined the method of educational ecology as "to examine the links between educational institutions and structures and the broader societies that sustain them and are affected by them". He regarded education as an organic, complex and unified system, in which all the factors (schools and other educators) in the educational ecosystem are organically linked, which in turn shows consistency and contradiction, balance and imbalance dynamically. It is a new concept that promotes education development ecologically from the view of world outlook, sense of worth, communication, balance, and dynamic perspective to investigate education problems and then carry on education research theoretically and practically in a brand new ecological way. Educational Ecology plays a crucial role in the Education Institutions. "By gaining a deeper understanding of how different factors contribute to the classroom ecology, particularly in the critical first years of school, we can make more informed practice and policy changes that will foster and improve positive environmental factors and reduce negative environmental factors," said Jennifer Bostic, Early Learning Ohio project director, OSU team. The concept of Educational Ecology offers a holistic framework for understanding the myriad of interconnected factors that shape the learning environment within classrooms. At its core, educational ecology recognizes that the classroom is not an isolated entity, but a dynamic ecosystem influenced by a myriad of internal and external elements, including pedagogical practices, student-teacher relationships, institutional culture, and societal expectations. Fostering a positive classroom climate is crucial for enhancing student engagement, motivation, and overall well-being. A positive classroom climate nurtures a sense of belonging, reduces stress, and promotes active learning, thereby supporting academic achievement and personal growth. By examining the role of educational ecology, educators and policymakers can gain valuable insights into how to create and maintain environments that are conducive to positive learning experiences. Research indicates that a supportive classroom climate not only improves academic outcomes but also promotes essential social skills among students. Factors such as the physical arrangement of the classroom, the emotional

tone set by the teacher, and the nature of peer relationships all contribute to the overall climate. For instance, teachers who adopt warm and inclusive practices create an environment where students feel valued and connected, leading to increased participation and reduced behavioral issues. Conversely, a negative classroom climate can hinder learning and exacerbate feelings of isolation among students.

As educational systems continue to evolve towards inclusivity, it is crucial for educators to recognize the importance of educational ecology in their teaching practices. This paper will examine key strategies for cultivating a positive classroom climate through effective organization, communication, and engagement techniques. By prioritizing these ecological factors, teachers can create an environment that not only supports academic achievement but also nurtures the social and emotional development of all students. Through this exploration, we aim to highlight the critical role of educational ecology in fostering a thriving classroom atmosphere that benefits both educators and learners alike. This paper explores how the principles of educational ecology can be leveraged to foster a positive classroom climate. It delves into the various components of the educational ecosystem, such as the physical environment, social dynamics, and instructional strategies, and how these elements interact to influence the classroom atmosphere. Through a comprehensive analysis, this study aims to highlight practical approaches and interventions that can be employed to enhance the quality of the learning environment, ultimately benefiting both students and educators.

REVIEW OF RELATED LITERATURE

Edwards, M and Magill, K.R (2023) written an article on **"Rethinking the educational ecology in the wake of COVID: Intellectual solidarity, teacher prestige, and educational humanization."** The authors examine changes to the United States educational ecology during the COVID-19 pandemic. This article draws on contemporary and historical research to critique how K–12 school policies and educational leadership decisions are made amidst a crisis. As schools and districts continue to navigate a shifting educational context, teachers are often left out of the discussion. The authors set out to argue that teachers should be at the center of any plan to move forward and that support for teachers and humanizing approaches to teaching and learning should be at the forefront of any change. Drawing on theories of an educational ecology, the authors investigate how this moment of rapid change might be leveraged, through their exploration of future-oriented educational policies. In doing so, they highlight key areas of the educational ecology with the most potential to (re)humanize teachers' work and support the well-being of students. These include creating policies and systems of preparation and support for historically marginalized groups of teachers, advocating for a more human-centered curriculum, and taking a cautious approach to the presence of technology for instructional and pedagogical purposes. The authors conclude with a call for intellectual solidarity, increases in teacher prestige, and new visions of accountability, ideology, curriculum, and human exchange.

Sadinovna, K.D. (2022) written a research article on the topic of **"Integrative Approach to Forming Ecological Culture of Future Primary Class Teachers."** The article examines the theoretical and practical aspects of forming the ecological culture of future elementary school teachers based on an integrative approach. That is, in this, the interdisciplinary harmony of educational activities, which contributes to the holistic perception of the world and is aimed at the formation of human ecological culture, is ensured.

Qiu, F (2022) written an article on **"Reviewing the role of positive classroom climate improving English as a foreign language students' social interactions in the online classroom."** This study aims to review the contribution of a positive classroom climate to the improvement of students' social interaction in the online L2 classroom. To do this, the findings of the relevant studies have been presented and their implications for the construction of a positive online L2 classroom climate have been provided. Suggestions are made on how to help teachers create a positive climate in online L2 classes and how to pave the way for more effective social interactions between teachers and students and among students. Also, implications are provided for L2 teachers, researchers, and trainers, especially in the post-pandemic era.

Li, J (2021) conducted a study on **"University Students' Home-Based Learning Engagement in the Synchronous Online Course: The Perspective of Educational Ecology."** Synchronous online courses have received wide attention during the COVID-19 pandemic. Students had to attend classes online at home or in dormitories instead of face to face. Learning engagement in synchronous online courses is an important indicator in evaluating the quality of online teaching and learning. Therefore, using a questionnaire, in this study the factors that affect university students' learning engagement in home-based synchronous online courses were investigated from the perspective of an educational ecosystem. The results showed that the overall level of university students' learning engagement in synchronous online courses is in a good condition. In addition, there was no significant difference in learning engagement among students of different genders, degrees, disciplines, and living environments. The ecological subjects (i.e., teachers and the student themselves) as well as the ecological environment (i.e., the resource environment) were the main factors affecting the learning engagement in the synchronous classroom.

Khalfaoui, A et al., (2020) conducted a study on the topic **"A Systematic Review of the Literature on Aspects Affecting Positive Classroom Climate in Multicultural Early Childhood Education."** A systematic review was conducted to gain a better understanding of the pedagogical and structural aspects that foster a positive classroom climate in multicultural early childhood education settings. Following a systematic review procedure, 14 articles were selected and included in the analysis. The findings indicate that eight aspects contribute to a positive climate in these settings: on the one hand, pedagogical practices, including increased instructional time, teacher-student supportive interactions, peer interactions and friendship, child engagement, teacher training on emotionally supportive environments and teacher-family trust-based relationships, and on the other hand, structural aspects, including small peer groups and materials shared among children. This evidence may be used to foster a classroom climate that enhances learning processes and social development in multicultural preschool

groups. However, more research is needed to better understand the particular role that cultural diversity plays in the classroom climate.

Goldenberg, J and Klavir, R (2017) written a research paper on **"School Climate, Classroom Climate, and Teaching Quality: Can Excellent Students Unravel this Connection?"** The study focused on the relationship among school climate, classroom climate, and teaching quality as they are perceived by teachers. These relationships were examined by means of an online questionnaire completed by two groups of teachers: graduates from the REGEV Outstanding Student Teacher Education Program (the Excellence Program), and graduates from traditional teacher education programs The findings show a significant correlation between school climate and classroom climate and between school climate and teaching quality among graduates from traditional programs. The findings therefore indicate a weak influence from external factors, e.g., on school climate, on classroom climate, and even weaker influence on the teaching quality of Excellence Program graduates compared to graduates from traditional teacher education programs.

Brennan, L.M. et al., (2015) written a research paper on the topic of **"Influence of Classroom and School Climate on Teacher Perceptions of Student Problem Behavior."** This study examined student problem behavior through an ecological lens by taking into account individual (e.g., gender, ethnicity, pro-social behavior), classroom (e.g., class size, average classroom behavior), and school-level factors (e.g., location, school climate). Using data from 37 elementary schools, 467 classrooms, and 8,750 students, a series of hierarchical linear models was tested. Multilevel analyses revealed that while individual student characteristics had the largest influence on problem behavior, average pro-social behavior and concentration problems of students within the classroom, as well as teacher perceptions of the school climate significantly related to how students behaved. These findings support the use of classroom-based intervention programs to reduce student problem behavior.

RESEARCH QUESTIONS

1. What are the key components of educational ecology that contribute to the development of a positive classroom climate?
2. What challenges and opportunities do educators face when implementing educational ecological practices aimed at enhancing classroom environments?

RESEARCH OBJECTIVES

This research paper aims to find following objectives:

1. To explore the key components of educational ecology that influence the creation of a positive classroom climate.
2. To understand the challenges and opportunities in implementing educational ecology practices to enhance classroom environments.

RESEARCH METHODOLOGY

A qualitative research design was employed for this study, focusing on:

Document Analysis: A comprehensive reviews of relevant documents, such as curriculum materials, research papers, research articles and school policies analyzed to identify explicit and implicit aspects of educational ecology.

RESULTS AND DISCUSSIONS

OBJECTIVE 1 Key components of educational ecology that influence the creation of a positive classroom climate.

Here are some theories and components of educational ecology which creates a positive classroom climate. Most research on school climate has adopted a quantitative approach based on student reports (Garzia & Molinari, Citation2021; Lenz et al., Citation2021; Wang & Degol, Citation2016). While such studies have elicited important knowledge on school climate, teacher reports and qualitative research methodologies should not be underrated.

1. **To cultivate a positive classroom climate, instructors need to build strong rapport with students (Barr 2016) by incorporating seven dimensions of classroom climate (Fraser and Treagust 1986).**

Personalization	Students know the instructor sees them as individuals and cares about their well-being and success.
Involvement	All students are actively invited to participate in the class resulting in an inclusive learning environment.
Student Cohesiveness	Students are encouraged to know and work with their peers during class activities to build a sense of community.
Satisfaction	Students find value in and enjoy coming to class.
Task Orientation	Students find class activities to be worthwhile, well-organized, and clearly aligned to learning objectives/goals and expectations.
Innovation	Activities and assignments are designed using pedagogical best-practices. Students understand why the instructor is using these activities and assignments (explicit statements by instructor on why students are doing specific tasks).
Individualization	Students are given autonomy/choice for some aspects of the class which allows them to develop/explore areas that are interesting to them.

Figure: 1

"Barr 2016, mentioned about that how to create **Building Classroom Climate":**

Open and Warm Communication
Inclusive Environment
Organization and accessibility of course content.

Figure: 2

According to Barr, building a good classroom climate plays a very crucial role in influencing educational ecology. These three components which is above mentioned are helpful to create enthusiastic ecology in institutions. These components collectively contribute to the educational ecology that shapes a positive classroom climate, emphasizing the importance of an integrated approach to fostering effective learning environments.

2. **Zedan, R. (2010)** written a research paper on the topic of "New dimensions in the classroom climate" which is a review based research paper where he mentioned many research paper on school climate that influenced classroom environment positively and create a good educational ecology.

Classroom climate encompasses the five factors:

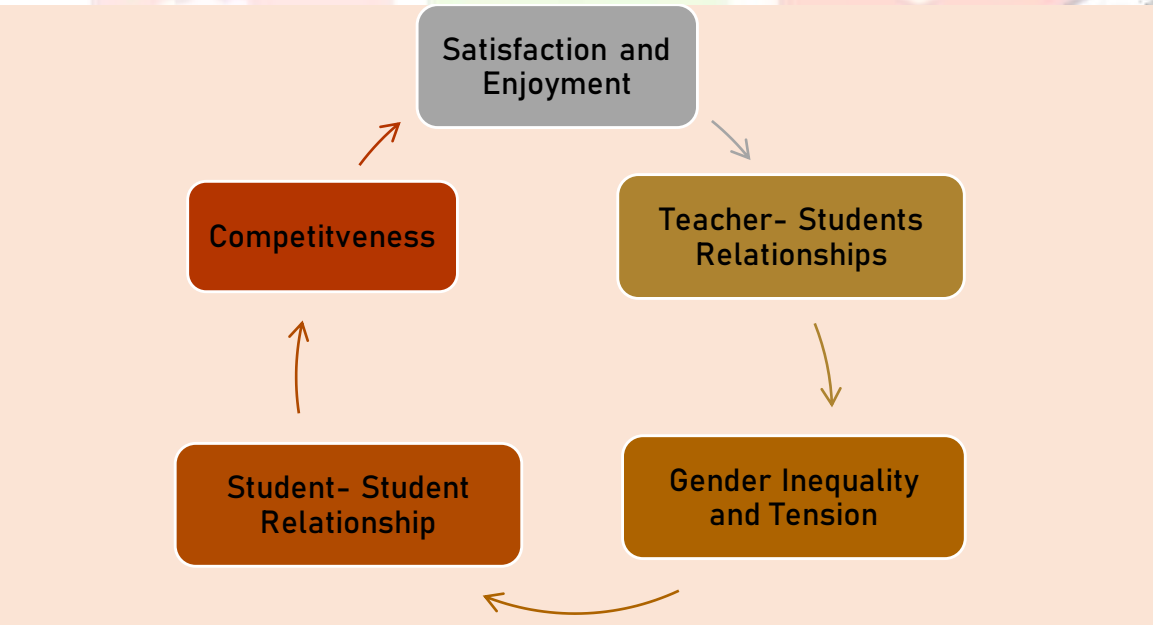

Figure: 3

As we can see that According to Zedan, these five factors are important for creating a positive classroom climate. These five factors plays an essential role in educational ecology of an institutions that contributed in the development of a positive classroom climate.

3. **H. Jerome Freiberg** has written a book. **In Chapter II, Bert P.M. Creemers and Gerry J. Reezigt** wrote the chapter on **"The Role of School and Classroom Climate in Elementary Schools Learning Environment".**

School Climate
Physical Environment of the School
Social System in the School
Orderly Classroom Environment
Expectations about Teacher Behavior/ Student Outcomes

Classroom Climate
Physical Environment of the School
Social System in the School
Orderly Classroom Environment
Expectations about Student Outcomes

Figure: 4

Source: Creemers, 1994

Findings on the key components of educational ecology that influence the creation of a positive classroom climate.

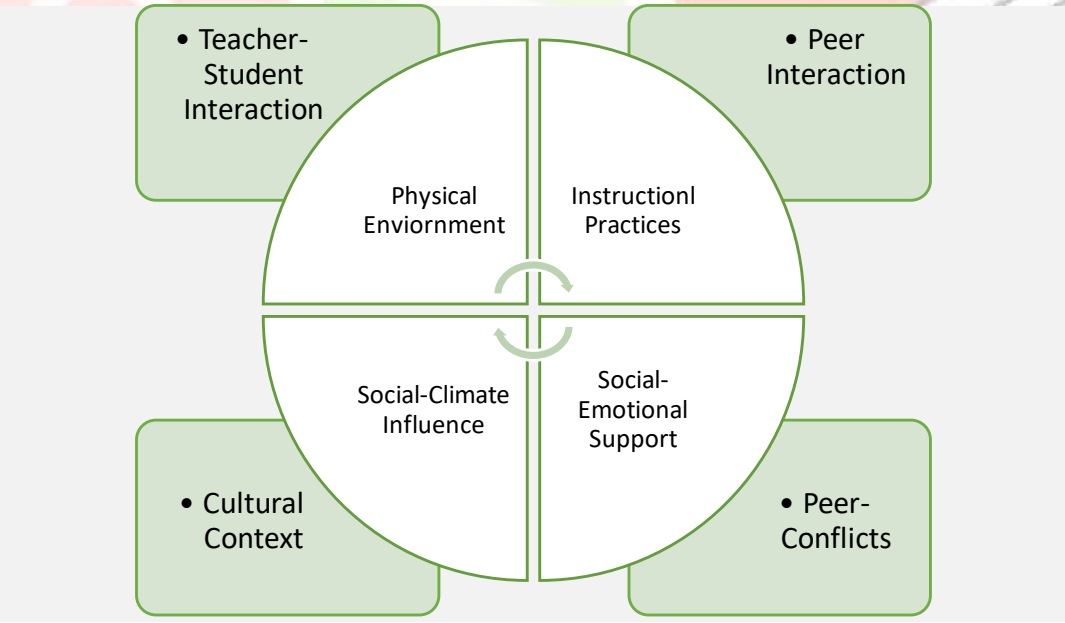

Figure: 5

The chart summarize that these are the key components of Educational Ecology which can influence the creation of a classroom climate in a better way.

On the basis of above researches in conclusion, Educational Ecology plays a pivotal role in shaping a positive classroom climate, which is essential for fostering student engagement, motivation, and overall success. Ultimately, the influence of educational ecology extends beyond individual classrooms; it shapes the broader school culture and impacts students' lifelong learning experiences. By embracing a holistic approach that considers all components of educational ecology, educators can create vibrant learning environments where students feel empowered to explore, engage, and excel.

OBJECTIVE 2 Challenges and opportunities in implementing educational ecology practices to enhance classroom environments.

Here is a tabular representation of the findings on the challenges and opportunities.

Table 1: Findings on the challenges and opportunities in implementing educational ecology practices to enhance classroom environments.

Findings	Challenges	Opportunities	Implementations	References
Effective classroom ecology positively impacts student engagement and academic performance	Limited resources hinder the adoption of ecological practices in classrooms	Schools can seek grants and community partnerships to fund ecological initiatives	Implementing outdoor classrooms and nature-based learning experiences to enhance student connection to the environment	Kolpin, A. (2019).
Interpersonal relationships among students and teachers are crucial for a positive classroom climate	Resistance to change among educators may impede the integration of new ecological practices.	Professional development programs can enhance teachers' skills in environmental education	Incorporating project-based learning that integrates ecological concepts across subject	Liu, W. (2022).
Physical classroom environments, including natural elements, contribute	Lack of training for teachers on how to effectively	Community engagement initiatives can foster a collaborative	Creating green spaces within schools or partnering with local organizations	Emerging Theme: Classroom Ecology - Early

to overall student well-being	implement educational ecology practices	approach to ecological education.	for outdoor learning experiences.	Learning Network
Schools with well-designed physical spaces (e.g., natural lighting, green areas) see improved outcomes	Safety concerns regarding outdoor activities may deter implementation of ecological practices	Utilizing technology (e.g., virtual reality) to create immersive learning experiences that complement outdoor education.	Developing curriculum that emphasizes sustainability and environmental stewardship through hands-on projects	Educational Ecology: How to Protect and Enhance the Environment in Education

Table: 1

Table 1, provides a clear overview of the findings related to educational ecology, the challenges faced in its implementation, potential opportunities for enhancement of classroom environment.

While the implementation of Educational Ecology practices faces challenges such as resource constraints, resistance to change, and diverse classroom needs, these can be mitigated through targeted interventions like professional training, community engagement, and policy support. By capitalizing on opportunities such as enhanced student engagement, inclusivity, and technological advancements, educators can create enriched classroom environments that promote learning and well-being. The implementation of educational ecology practices presents both significant challenges and promising opportunities for enhancing classroom environments. While resource limitations, safety concerns, and resistance to change can hinder progress, there are numerous avenues for improvement, including the integration of sustainable practices, professional development for educators, and community engagement initiatives. By leveraging these opportunities, schools can create enriched learning environments that not only foster academic achievement but also instill a deep sense of environmental stewardship in students. Ultimately, addressing these challenges while capitalizing on available opportunities will empower future generations to navigate and address pressing environmental issues effectively.

CONCLUSION

The exploration of educational ecology reveals that its key components significantly influence the creation of a positive classroom climate, which is essential for effective learning and student development. This research highlights several critical elements, including teacher-student interactions, peer relationships, the physical environment, instructional practices, and the overall school culture. Each of these components plays a vital role in shaping students' experiences and perceptions within the classroom. From the findings, it is evident that positive teacher-student relationships foster an atmosphere of trust and support, which is crucial for student engagement. Similarly, encouraging positive peer interactions enhances a sense of community and belonging among students, further contributing to a supportive learning environment. The physical setup of the classroom—encompassing organization, accessibility, and aesthetics—also significantly impacts students' comfort and focus, ultimately affecting their academic performance. However, the implementation of educational ecology practices is not without challenges. Budget constraints, resistance to change among educators, and diverse student needs can hinder efforts to create an optimal learning environment. Additionally, ensuring that all students feel emotionally safe and supported requires ongoing attention and resources. Despite these challenges, there are numerous opportunities for enhancing classroom environments through professional development for teachers, community engagement initiatives, and the integration of sustainable practices. By addressing these challenges and leveraging available opportunities, educators can cultivate a classroom climate that not only promotes academic success but also nurtures social-emotional development. The findings underscore the importance of a holistic approach to educational ecology—one that recognizes the interconnectedness of various elements within the learning environment. In conclusion, fostering a positive classroom climate through educational ecology is essential for preparing students to thrive academically and socially. As educational institutions continue to evolve, prioritizing these ecological components will be crucial in creating inclusive and supportive environments that empower all learners. By investing in professional development, community partnerships, and innovative teaching strategies, schools can enhance their educational practices and ultimately improve student outcomes.

REFRENCES

Aydin, D. G., & Karabay, Ş. O. (2019). Improvement of classroom management skills of teachers leads to creating positive classroom climate. *International Journal of Educational Research Review*, *5*(1), 10–25. https://doi.org/10.24331/ijere.646832

Bacon, K. L., & Peacock, J. (2021). Sudden challenges in teaching ecology and aligned disciplines during a global pandemic: Reflections on the rapid move online and perspectives on moving forward. *Ecology and evolution*, *11*(8), 3551–3558. https://doi.org/10.1002/ece3.7090

Bradley, C. et al., (2018). Supporting improvements in classroom climate for students and teachers with the four pillars of wellbeing curriculum. *Translational Issues in Psychological Science*, *4*(3), 245–264. https://doi.org/10.1037/tps0000162

Bradley, C. et al., (2018). Supporting improvements in classroom climate for students and teachers with the four pillars of wellbeing curriculum. *Translational Issues in Psychological Science*, *4*(3), 245–264. https://doi.org/10.1037/tps0000162

Bradley, C., Cordaro, D. T., Zhu, F., Vildostegui, M., Han, R. J., Brackett, M., & Jones, J. (2018). Supporting improvements in classroom climate for students and teachers with the four pillars of wellbeing curriculum. *Translational Issues in Psychological Science*, *4*(3), 245–264. https://doi.org/10.1037/tps0000162

Çengel, M., & Turkoglu, A. (2016). Analysis through Hidden Curriculum of Peer Relations in Two Different Classes with Positive and Negative Classroom Climates. *Educational Sciences Theory & Practice*. https://doi.org/10.12738/estp.2016.6.0103

Chiriac, E. H., et al., (2023b). Teachers' perspectives on factors influencing the school climate: A constructivist grounded theory case study. *Cogent Education*, *10*(2). https://doi.org/10.1080/2331186x.2023.2245171

Derakhshan, A. et al., (2022). Exploring the predictive role of teacher immediacy and stroke behaviors in English as a foreign language university students' academic burnout. *Studies in Second Language Learning and Teaching*, *12*(1), 87–115. https://doi.org/10.14746/ssllt.2022.12.1.5

Early Learning Network | Emerging theme: Classroom ecology. (2020, February 3). https://earlylearningnetwork.unl.edu/2020/02/03/classroom-ecology/

Freiberg, H. J. (1999). *School Climate: Measuring, improving and sustaining healthy learning environments*. http://ci.nii.ac.jp/ncid/BA43254671

Hau, H. G. et al., (2021). Capitalizing on classroom climate to promote positive development. In *Springer series on child and family studies* (pp. 375–386). https://doi.org/10.1007/978-3-030-70262-5_25 https://doi.org/10.1641/0006-3568(2001)051[0283:CFEEIA]2.0.CO;2

https://fastercapital.com/content/Educational-Ecology--How-to-Protect-and-Enhance-the-Environment-in-Education.html

Khalfaoui, A. et al., (2020). 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. https://doi.org/10.1007/s10643-020-01054-4

Kolpin, A. (2019). Understanding and Evaluating Classroom Ecology [Master's thesis, Bethel University]. Spark Repository. https://spark.bethel.edu/etd/361

Liu, W. (2022). A teaching design of ecological class based on immersive virtual reality spatial fusion. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.874101

Ozen, H. (2018). A qualitative study of school climate according to teachers' perceptions. *Eurasian Journal of Educational Research*, *18*, 1–18. https://doi.org/10.14689/ejer.2018.74.5

Ramakrishnan, A. et al., (2019). Toward Automated Classroom Observation: Predicting Positive and Negative Climate. *IEEE*. https://doi.org/10.1109/fg.2019.8756529

Sadinovna, K. D. (2022, July 27). *INTEGRATIVE APPROACH TO FORMING ECOLOGICAL CULTURE OF FUTURE PRIMARY CLASS TEACHERS*. http://www.journalzone.org/index.php/bjgesd/article/view/84

Stewart J. Hudson, Challenges for Environmental Education: Issues and Ideas for the 21st Century: Environmental education, a vital component of efforts to solve environmental problems, must stay relevant to the needs and interests of the community and yet constantly adapt to the rapidly changing social and technological landscape, *BioScience*, Volume 51, Issue 4, April 2001, Pages 283–288,

The Talpiot Academic College of Education & The Mofet Institute, Israel. (2017). School Climate, Classroom Climate, and Teaching Quality: Can Excellent Students Unravel this Connection? In *International Journal*

for Talent Development and Creativity (Vols. 5–5, Issue 1, p. 137). https://files.eric.ed.gov/fulltext/EJ1301500.pdf

Toward automated classroom observation: predicting positive and negative climate. (2019, May 1). IEEE Conference Publication | IEEE Xplore. https://ieeexplore.ieee.org/abstract/document/8756529

Wals, A. E. J., & Benavot, A. (2017). Can we meet the sustainability challenges? The role of education and lifelong learning. *European Journal of Education*, *52*(4), 404–413. https://doi.org/10.1111/ejed.12250

Zedan, R. (2010). New dimensions in the classroom climate. *Learning Environments Research*, *13*(1), 75–88. https://doi.org/10.1007/s10984-009-9068-5