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# Application of Classroom Management Techniques in Inclusive Education of Secondary Teachers

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Abstract: This study determined the classroom management techniques in inclusive education applied by the Junior and Senior High School teachers in Tabaco City Division SY 2023-2024. Specifically, it answered the following sub-problems. 1. What are the classroom management techniques applied in inclusive education by the secondary teachers? 2. What is the level of application of classroom management techniques in inclusive education along; implements classroom routine and structure; creates safe space; ensures positive peer interaction; encourages collaboration with others; and provides social and emotional support? 3. Is there a significant difference on the level of application of classroom management techniques in inclusive education between the Junior and Senior High School teachers? 4. What are the effects of the classroom management techniques to the learners along; cognitive; affective; and psychomotor? 5. What are the problems encountered by the teachers on the application of the classroom management techniques? 6. What plan of action may be proposed to address the problems?

Quantitative-survey type of research was employed in this study. This type of research was applied along the identification of classroom management techniques by the secondary teachers and its level of application. Likewise, on the effects of the classroom management techniques to the learners and to the problems encountered by the teachers. An action plan was proposed to address the problems. The study has a total of 331 respondents, 265 were Junior High School teachers and seventy-five (75) were Senior High School teachers. The data collected to determine the classroom management techniques applied by secondary teachers were treated using frequency count and percentage. However, to identify the level of its application, frequency count and weighted mean were utilized. In the identification of the problems encountered the researcher used frequency count and ranking.

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## I. INTRODUCTION

The emergence of technologies made libraries realize the Globally, classroom management has shifted to focus on inclusivity, aligning with international goals like the United Nations' Sustainable Development Goal 4 (SDG 4), which promotes equitable and quality education for all. Countries have revised their education policies, introduced inclusive curricula, and invested in teacher training to address diverse learning needs. Organizations such as UNESCO and UNICEF support these efforts by offering resources and guidance to schools. In developed countries, inclusive education often includes assistive technologies and personalized learning plans, while in

developing nations, community-based support and peer mentoring are commonly used to address limited resources. These global efforts emphasize creating supportive learning environments that encourage empathy, collaboration, and respect among all students.

In the Philippines, inclusive education is backed by legal frameworks such as the Enhanced Basic Education Act of 2013 and the Magna Carta for Disabled Persons, which mandate equal educational opportunities for learners with disabilities. The Department of Education (DepEd) has issued guidelines, such as Department Order No. 72, s. 2009, to support the integration of children with special needs into mainstream

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schools. In Tabaco City, the diversity of learners in secondary schools presents unique challenges that require effective classroom management strategies to ensure inclusivity. This study explores the techniques used by secondary teachers in Tabaco City, analyzing their effectiveness in fostering inclusive education. By using both qualitative and quantitative methods, the research aims to identify best practices and provide actionable recommendations for educators, school leaders, and policymakers, contributing to the successful implementation of inclusive education at the local level.

### II. THEORETICAL FRAMEWORK

In examining the application of classroom management techniques in inclusive education of secondary teachers, several theoretical frameworks could be considered to provide a comprehensive understanding of their practices.

These foundational four foundational theories were; First, <sup>43</sup>Alfie Kohn's Classroom Management Theory which emphasize that creating a classroom environment is centered on respect, trust, and student autonomy, moving beyond control to foster intrinsic motivation and a sense of community. Second, <sup>44</sup>Vygotsky's Zone of Proximal Development (ZPD) suggests that students learn best when they receive support slightly beyond their current abilities, underscoring the value of tailored guidance in inclusive settings. Third, <sup>45</sup>Maslow's Hierarchy of Needs highlights that students' basic needs, such as safety and belonging, must be met to enable engagement and growth. Lastly, <sup>46</sup>Vygotsky's Collaborative Learning Theory which reinforces the role of social interaction in cognitive development, where students gain deeper understanding through collaboration with peers and teachers.

The first theory Alfie Kohn's Classroom Management Theory advocates for a collaborative and community-oriented approach in the classroom, emphasizing student autonomy, mutual respect, and intrinsic motivation rather than control and compliance. In the context of inclusive education, this theory suggests that effective management involves creating a space where all students, regardless of background or ability, feel valued and engaged. By focusing on the development of a respectful classroom culture, Kohn's approach supports diversity and fosters a safe space where students can express themselves freely. This theory aligns with the study's goal of exploring management techniques that contribute to a positive and inclusive environment, as it encourages students' active involvement and reduces behavioural issues that can stem from feelings of isolation. The study leverages Kohn's ideas to emphasize the importance of teachers in facilitating a classroom atmosphere that promotes cooperation and respect as fundamental to inclusive education.

In addition, Clough and Corbett's perspective on inclusive education can be considered a foundational theory for studying inclusion in the 21st century because it critically examines the historical, social, and institutional factors that shape educational practices. Their work highlights how exclusion is often reinforced by rigid educational structures, policies, and traditional teaching methods that fail to accommodate diverse learners. By focusing on systemic change rather than merely placing students with disabilities into mainstream classrooms, their approach shifts the conversation from integration to true inclusion. This makes their theory highly relevant in contemporary discussions on equity, access, and diversity in education.

In the 21st century, inclusive education goes beyond addressing the needs of students with disabilities; it encompasses all forms of diversity, including cultural, linguistic, and socioeconomic differences. Clough and Corbett's emphasis on inclusive pedagogies, differentiated instruction, and whole-school approaches aligns with the need for flexible and adaptable teaching strategies that cater to all learners. Their critique of the gap between policy and practice is also crucial in today's context, where many education systems promote inclusion in theory but struggle with its implementation. By addressing both structural barriers and attitudinal changes needed for real inclusion, their framework provides a comprehensive foundation for studying inclusive education today.

As education systems worldwide aim to create more equitable learning environments, Clough and Corbett's work remains highly relevant. Their emphasis on the political nature of inclusion, the need for teacher education, and the importance of a school-wide commitment to diversity ensures that their theory continues to shape modern inclusive education discourse. By integrating their perspectives into contemporary research, scholars and educators can critically assess current challenges and develop more effective strategies for fostering inclusive learning environments in the 21st century.

Furthermore, Vygotsky's Collaborative Learning Theory emphasizes that social interaction is essential for cognitive development, as students construct knowledge through engagement with peers and teachers. Thus, in an inclusive classroom, collaborative learning supports diverse abilities by enabling students to learn through group activities and peer interactions. Accordingly, the study applies this theory to explore how collaborative activities foster inclusivity by promoting empathy, shared understanding, and collective problem-solving. Through structured collaboration, students benefit from exposure to various perspectives, creating a learning experience that is both shared and supportive. In this way, Vygotsky's Collaborative Learning Theory aligns with the study's objectives, showing how collaborative tasks encourage active engagement and help students feel connected within a classroom community.

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These theories are crucial to the study as they collectively provide a multifaceted understanding of how to effectively implement classroom management techniques within inclusive education. First, they highlight the fundamental principles of respect, collaboration, and community, which are essential for creating a welcoming and engaging classroom environment. This ensures that all students, regardless of their diverse backgrounds or abilities, feel valued and included. Moreover, these theories emphasize the importance of addressing both the emotional and academic needs of students, recognizing that feelings of safety and belonging are vital for learning.

### III. REVIEW ON LITERATURES AND STUDY

UNICEF emphasizes that inclusive education systems not only support individual academic achievement but also help build social cohesion by exposing students to diversity, allowing them to grow together in a supportive environment that mirrors society. In this sense, examining how secondary teachers in Tabaco City apply inclusive classroom management techniques provides insight into the effectiveness of these strategies and highlights areas where additional support or professional development may be needed. This study, therefore, contributes to our understanding of how inclusive principles are translated into practical, everyday classroom interactions and structures.

Madesh (2023)<sup>2</sup> emphasizes that inclusive education has become a significant trend advocated by international organizations that focus on advancing education for individuals with disabilities. These organizations see inclusive education as essential not only for academic equality but also for upholding fundamental human rights, such as citizenship and a sense of belonging. They argue that any educational system aspiring to align with global standards should embrace inclusivity as a foundational principle. This shift reflects the broader recognition of inclusive education as a mechanism for promoting equality, social integration, and community participation for students with disabilities.

The article of Malone (2022)<sup>3</sup>, stated that teaching can be challenging, especially when working with students who have learning disabilities. However, he believes that the most fulfilling experiences in life and in teaching often come after overcoming difficult obstacles. Malone emphasizes that all students, regardless of their disabilities, have the capacity to learn and succeed, provided they have the right mindset, strategies, and attitudes. He emphasizes that all students are capable of learning, highlighting the importance of recognizing their potential regardless of any disabilities they may have. Furthermore, she asserted that a student doesn't necessarily require a documented disability, an Individual Education Plan (IEP), or placement in a special education setting to gain from effective teaching techniques. Strategies that prove beneficial for students with disabilities are likely to also be advantageous for their non-disabled classmates. Additionally, it's crucial to acknowledge that what may be effective on one occasion with specific learning materials may not yield the same results on another day with different content. Adaptability is essential in teaching, and the strategies outlined below are just a selection of the numerous approaches that could be effective in various scenarios with students.

On the other hand, according to Weinstien (2016)<sup>4</sup>, classroom management encompasses the actions taken by teachers to create and maintain an environment conducive to students' academic, social, emotional, and moral development. Rather than merely enforcing order, its primary objective is to facilitate learning. It is widely acknowledged by teachers, administrators, parents, students, and the general public as an essential aspect of effective teaching. However, mastering classroom management is a complex task, often leading to stress, anxiety, and burnout among educators, and sometimes even prompting them to leave the profession. Both novice and experienced teachers encounter challenges in managing classrooms, exacerbated by factors such as larger class sizes, cultural and linguistic diversity, inclusion of students with disabilities, and curriculum demands for standardized testing preparation.

Unfortunately, teacher preparation programs often provide minimal instruction in classroom management, partly due to fragmented research across different disciplines and traditions, leading to misconceptions about its significance. Moreover, the term "classroom management" itself lacks a straightforward definition, having evolved beyond mere discipline to encompass a broader range of tasks aimed at fostering a positive learning environment, including proactive measures to prevent behavioral issues.

In the statement of Chandra (2015)<sup>5</sup>, teachers play a crucial role in ensuring effective classroom management. It is incumbent upon educators to engage students in such a way that they are motivated to attend and actively participate in their lessons. However, some teachers often find themselves grappling with issues related to student behavior and discipline within their classes. This can significantly hinder the learning process, as students may become disengaged or choose to skip classes altogether. Unfortunately, many students today fail to recognize the importance of their education, leading them to disregard attendance and participation. Even when faced with suspension for absenteeism, these students often remain indifferent, showing little concern for their academic progress. Simply staying at home does not seem to alter their attitude towards learning.

Teachers of learners with special needs often encounter additional complexities in managing their classrooms due to factors such as diverse learning styles, individualized educational plans, and unique behavioral challenges. Therefore, the responsibility of creating an engaging and supportive learning environment becomes even more crucial in this

context. Both bodies of work underscore the fundamental importance of effective management in fostering learning environments and promoting student engagement.

Addressing behavioral challenges is recognized as essential in both contexts, as is the responsibility of teachers to create an atmosphere conducive to attendance, participation, and academic growth. However, managing classrooms for learners with special needs introduces greater complexity due to the diverse range of student needs, requiring more individualized approaches tailored to each student. Additionally, collaboration with support staff and caregivers is more pronounced in this context, emphasizing the need for a multidisciplinary approach to address students' unique requirements. Furthermore, while inclusivity is a key consideration in both settings, it takes on a heightened significance in classrooms for learners with special needs, where creating environments that accommodate diverse abilities and needs is paramount.

Harington (2019)<sup>6</sup> highlighted that teacher's role extends beyond simply delivering academic content; they must also equip students with the tools for both social and academic success, both within and outside the classroom. This involves fostering critical thinking skills to enable students to analyze the world around them independently. Moreover, students must become adept at utilizing higher-order thinking skills to navigate the vast amount of information available in our rapidly evolving digital age. Just as teachers are accountable for employing various teaching methods, students must also take responsibility for their own learning process, especially for success in higher education settings where personal effort and metacognitive skills are crucial.

This literature emphasizes the importance of empowering students, whether it's through equipping them with critical thinking skills or encouraging them to take ownership of their learning process. In contrast, classroom management techniques for learners with special needs may involve more focus on providing additional support and assistance to students who require it, compared to the more generalized approach discussed in the previous study.

In light manner, Polirstok (2015)<sup>7</sup> highlighted in his article that 21st-century classrooms are legally required to be inclusive, integrating general education students with those who have mild to moderate learning and behavioral challenges. This creates additional complexities for classroom management, necessitating that teacher adopt a structured, consistent, and reinforcing approach. Teachers must remain faithful to the established behavioral expectations in the classroom. Polirstok discusses several key classroom management strategies, including adjusting the ratio of teacher approval to disapproval, using selective ignoring for certain behaviors, emphasizing structure and routine, empowering students by increasing their locus of control, de-escalating

aggressive or hostile behaviors, and minimizing the use of punitive measures. The emphasis is placed on practical, hands-on techniques that can be applied directly in the classroom to improve management and support student learning.

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This literature focusses on the complexities of managing inclusive classrooms, where teachers work with a mix of general education students and those with mild to moderate learning or behavioral challenges. In both contexts, teachers are required to adopt highly structured, consistent, and reinforcing strategies to maintain an effective learning environment. Polirstok's study emphasizes the need for fidelity to established behavioral expectations, a concept mirrored in the Tabaco City study, which also underscores the importance of routine and structure in classroom management. Additionally, both research efforts highlight the use of practical, hands-on strategies for de-escalating aggression, increasing student responsibility, and minimizing punishment, reflecting a shared understanding of best practices in inclusive education.

According to Lathan (2024)<sup>8</sup>, inclusive learning provides all students with a variety of flexible educational options and effective routes to achieve their academic goals in environments that foster a sense of belonging. In inclusive classrooms, students of all abilities learn alongside one another in age-appropriate settings, based on the belief that all children and families deserve equal value and access to opportunities. Research has demonstrated that such inclusive classrooms yield significant advantages for both students with disabilities and their classmates. Rather than pulling students out for specialized instruction, special education teachers work directly within the classroom.

This approach enables collaboration between general education teachers and specialists, enhancing the learning experience for everyone by offering additional resources and support. This support typically results in better academic outcomes for both students with disabilities and those without; creating a more enriched educational experience for all.

In like manner Sanir et al (2022)<sup>9</sup> stated that effective teaching arises from interactions that address students' academic, emotional, and social needs. These teacher-student interactions are crucial for fostering student learning, especially in a well-structured classroom environment. For teaching to be effective, educators must tailor their approaches based on the current knowledge and skills of their students rather than adhering to a fixed set of teaching behaviors. Instructional adaptations that support the learning of students with special needs are recognized as essential teaching strategies, requiring sensitivity and responsiveness to individual student needs. Research has shown that students with special needs benefit from effective classroom management, the use of varied teaching methods and techniques, and clear, simplified content delivery. These approaches are vital for ensuring that all

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students, especially those in risk groups, receive the support they require to succeed academically.

Furthermore, in his book, Thornbury (2012)<sup>10</sup>, describes classroom management as the process of guiding students' learning by organizing and controlling classroom activities. It encompasses both the actions taken and the consequences of not addressing management choices. The decisions made regarding classroom management significantly influence the unique atmosphere within the classroom—shaping whether it is a stimulating and enjoyable place for learning or a dull and uninspiring environment. These management choices reflect a teacher's beliefs about teaching, learning, and the potential of students, as well as the relationship dynamics between teacher and learner. They also illustrate how individuals within the classroom interact with each other and relate to the broader hierarchy of the educational institution.

Thornbury's perspective on classroom management serves as a valuable point of reference. He asserted that effective classroom management is fundamentally about how teachers organize and control the dynamics within their classrooms. He further emphasizes that these management choices significantly influence the learning atmosphere, ultimately determining whether the classroom is an engaging and enjoyable space or a dull and uninspiring one. This viewpoint suggests that the teacher's role in establishing a structured environment is crucial for fostering positive student interactions and learning outcomes.

However, while Thornbury focuses primarily on the teacher-centered approach, the present study recognizes the importance of adapting management strategies to accommodate the diverse needs of students in inclusive settings. This adaptability is essential, as it allows teachers to create a more collaborative environment where all students, regardless of ability, can participate actively in their learning. Additionally, Thornbury's emphasis on the reflective nature of management choices—how they reveal a teacher's beliefs about education and learners—provides a framework for analyzing how teachers in the Tabaco City Division can improve their classroom dynamics by embracing inclusivity.

Montanero's (2022)<sup>32</sup> research examines the degree of inclusion among primary school groups in Spain, focusing on five students with mild special educational needs (SEN) and utilizing a multiple-case design that combines observational and self-report techniques throughout a peer tutoring program. The study analyzes three components of inclusive education: presence, participation, and learning achievement, along with specific variables such as social acceptance, friendship choices, self-perception, and social interactions during learning. Findings indicate that students with SEN had lower inclusion rates compared to their peers, although the peer tutoring program improved their presence and achievement in the short

term, highlighting that such interventions alone are insufficient for lasting change in overall inclusion.

While both Montanero's study and the present research focus on inclusion for students with SEN and employ mixed methods to assess the effectiveness of specific strategies, Montanero's work is more narrowly focused on the impact of a peer tutoring program within primary education, whereas the present study may explore broader inclusive education strategies applicable across various contexts. Furthermore, Montanero emphasizes the need for sustained practices beyond a single intervention, while the present study might highlight different dimensions of teacher agency or educational policy recommendations, enriching the overall understanding of inclusive education challenges and strategies.

In the statement of Sanchez's (2023)<sup>33</sup> study focused on children with special needs in inclusive classrooms, aiming to understand general education instructors' experiences in teaching students with disabilities. This qualitative research explored the impact of teaching methods and classroom management on children's behavior, documenting various approaches used and the resulting behavioral changes observed among children with special needs in regular classroom settings. Furthermore, the study delved into the altruistic motivations of instructors in their dedication to educating children with disabilities.

The findings of Sanchez's research have several instructional and practical implications. Firstly, children with special needs often face challenges in interacting with their classmates due to their disabilities and behavior, often exhibiting disruptive behavior in the classroom. Since the implementation of Inclusive Education, instructors have employed diverse methods to address disruptive behavior, with consistent classroom management and appropriate teaching techniques identified as effective tools in managing children with special needs in inclusive settings. The study highlights that inclusive education can be successful when instructors employ effective tactics and manage their classrooms adeptly.

As a recommendation, future research could undertake comparable quantitative studies to assess general education teachers' perspectives based on the themes identified in Sanchez's study. This would further contribute to understanding the efficacy of inclusive education practices and inform strategies for supporting students with special needs in inclusive classrooms.

The study by Sanchez sheds light on the experiences of general education instructors in educating children with special needs in an inclusive classroom setting, emphasizing the impact of teaching methods and classroom management on the behavior of these children. It highlights the various methods used by instructors and the changes observed in the behavior of children with special needs within a regular classroom

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environment. Additionally, it underscores the altruistic motivations of instructors in dedicating themselves to educating children with disabilities.

Both the study conducted by Sanchez and the present research focus on inclusive education for students with special needs. Sanchez explored the experiences of general education teachers and the impact of various teaching methods and classroom management strategies on student behavior. Similarly, the current study investigates the classroom management techniques used by teachers for students with special needs, emphasizing the importance of effective strategies in supporting these learners. While Sanchez provided insights into broader practices in inclusive classrooms, both studies share a common goal of enhancing educational outcomes for students with disabilities.

In contrast, the present study aims to specifically investigate the classroom management techniques employed by teachers for students with special needs in selected secondary schools in Tabaco City. While Sanchez's research offered broader insights into inclusive education and the experiences of general education teachers, the current study focuses on the specific strategies and methods utilized by teachers in a particular geographic and educational context. Additionally, whereas Sanchez's study was purely qualitative, the present research may integrate both qualitative and quantitative approaches to evaluate teachers' perspectives and the effectiveness of their classroom management techniques. Overall, while both studies address critical aspects of inclusive education and classroom management for students with special needs, the present study is more concentrated on the localized practices and challenges faced by educators in a specific setting, potentially yielding more actionable insights for that context.

The study of Gonzaga (2024)<sup>34</sup> investigated the factors influencing the implementation of inclusive education in the Cebu Province, Philippines. A semi-structured survey was conducted among 104 general education teachers selected from three special education centers to gather data on their background, perceived preparedness, and encountered challenges. Descriptive and correlational analyses provided insights into teachers' experiences, revealing an overall sense of preparedness but a need for further training in collaboration skills. The teachers' profiles indicated that specialized inclusion training could be beneficial. Primary obstacles included limited resources such as specialist roles and facilities.

Notably, the study found a minimal correlation between preparedness and challenges, suggesting the need for multifaceted solutions. Both enhancing teacher competencies and addressing resource constraints were deemed essential. Given the complex interaction of factors, the study recommended a comprehensive, long-term approach encompassing pre-service training and systemic support based on input from teachers. The findings underscored the

importance of targeted readiness development, particularly in applied collaboration, and highlighted resource deficiencies as significant barriers requiring attention. Participants advocated for a coordinated, evidence-informed strategy involving reforms across all educational levels to promote inclusion effectively. The insights aimed to guide the development of practical and sustainable solutions by providing a deeper understanding of the realities faced on the ground.

Both studies involve gathering data from educators, either through surveys or interviews, to gain insights into their perspectives and experiences. Particularly, they both investigate factors influencing the educational experiences of students with special needs. However, Gonzaga study explores overall readiness and challenges faced by teachers in implementing inclusive education, while the present study focusses more specifically on strategies and approaches used by teachers in managing classrooms and addressing the needs of students with special needs.

Nonetheless, Gallardo and Canete (2019)<sup>35</sup> conducted a study to explore teachers' experiences in instructing special education students within regular classrooms. The research delved into teachers' observations of these students, the challenges they faced while teaching them, the strategies they employed to cope with these challenges, and their suggestions for alleviating difficulties. Utilizing a qualitative approach, specifically the phenomenological technique, data was gathered through semi-structured interviews with five teachers selected based on their involvement with special education students.

Both studies focus on the experiences of teachers in instructing students with special needs within regular classrooms. Significantly, both studies aim to identify the challenges faced by teachers in teaching special education students and explore their coping mechanisms and suggested actions for improvement. In contrast, study by Gallardo and Canete specifically investigates teachers' observations of special education students, their difficulties in teaching them, and their coping mechanisms, while the other study may focus on classroom management techniques employed by teachers.

Moreover, Obliopas (2018)<sup>36</sup> conducted a study on Classroom Management Strategies Implementation, Usefulness, and Issues and the frequency of occurrence of classroom management issues in Eastern Samar State University Main Campus. From the findings, the following conclusions were formulated: (1) generally, the classroom management strategies are strategies implemented by the faculty members in the university; (2) the classroom management strategies are perceived with a high utilization by the faculty members particularly in managing their classrooms; and (3) there is no significant correlation between the frequency of implementation and perceived usefulness of classroom management strategies and the frequency of occurrence of classroom management issues. The investigation recommends

that other external factors such as personal and family factors be investigated so as to obtain a clearer picture on other variables that may have any effect on students' behavior which in turn are determinants of behavioral issues that occur in the classroom.

Both studies, conducted by Obliopas (2018) and the present study share commonalities in terms of their focus on classroom management strategies and their impact on the learning environment. Previous study examines the perceptions and practices of faculty members, while the hypothetical study likely involves teachers working specifically with students with special needs. The recommendations in Obliopas's study suggest investigating external factors such as personal and family influences on student behavior, whereas the hypothetical study might focus more on individualized interventions and accommodations for students with special needs. Overall, while both studies share common themes related to classroom management, their specific focuses and contexts differ based on the populations studied and the nature of the classroom environments being examined.

The study of Corcelles (2020)<sup>37</sup> focused on examining how the classroom management approaches utilized by Grade ten teachers at Saint Michael College of Caraga affect student academic achievement. Using a descriptive research design, the study evaluated the impact of these approaches on students' academic performance. The findings revealed that both teachercentered and student-centered classroom management approaches were observed in the teaching-learning process. However, despite their presence, students' academic performance was found to be only approaching proficiency, indicating that the effectiveness of the teachers' classroom management approaches in achieving high academic performance was limited.

Both studies share a common goal of improving educational outcomes through effective classroom management practices. The findings from the study at Saint Michael College highlight the significance of teacher practices in creating a conducive learning environment and promoting student achievement. These insights can be particularly relevant for teachers working with learners with special needs, as they underscore the importance of implementing strategies that cater to diverse learning styles and needs.

While the study at Saint Michael College may focus on general classroom settings, its recommendations for on-going teacher training and professional development can be extrapolated to address the specific needs of teachers working with special needs learners. By incorporating principles from the study at Saint Michael College, such as the importance of clear expectations, supportive environments, and engagement strategies, educators can enhance their classroom management techniques to better support the academic and socio-emotional development of learners with special needs.

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The study by Naparan (2021)<sup>38</sup> explores the classroom approaches utilized by ten multigrade teachers in the East district of Tukuran, Zamboanga del Sur, Philippines, where several remote elementary schools are located. In this context, six multigrade schools were identified, with teachers responsible for instructing two grade levels simultaneously. Primary data were collected through semi-structured individual interviews. The findings indicated that multigrade teachers employ a variety of strategies, including Classroom Management, Collaborative Learning, Differentiated Instruction, Real-life Contextualization, Integration of Technology, and Teacher Flexibility.

In comparing this study with the current research, both emphasize the importance of effective teaching strategies in fostering positive learning environments for students with special needs. However, while Naparan's study focuses on multigrade settings and the specific challenges teachers face in remote areas, the present study targets secondary schools and the classroom management techniques employed specifically for students with special needs. Thus, while both studies explore classroom strategies, they differ in their educational contexts and student populations.

The study of Andrin (2021)<sup>39</sup> sought to find out the level of classroom management practices, the degree of correlation between the profile and classroom management practices, and the degree of variance among the ten dimensions of classroom practices. Chi-Square and One-Way ANOVA are the statistical tools used for the treatment of the data. The instrument used in this study is modelled from the Classroom Self-Assessment Tool of the Center on Education and Lifelong Learning by Washburn, S. (2010). This research used a descriptive survey method applying a purposive and universal sampling technique with all the 146 teachers as the participants from kindergarten to Grade Six classes of the respondent elementary school.

The findings of the study revealed a significant degree of correlation between the age, as well as, the number of years in teaching to the classroom management practices. Furthermore, the study showed the significant degree of variance among the ten dimensions of classroom management practices of the teacher participants. The results of the study evidently showed that the teacher participants are not fully practicing the three behavioral parts of the questionnaire. Such dimensions are the following: acknowledging appropriate behaviors, positive actions, and responding to inappropriate behaviors of the students.

In comparison to the present study, both research efforts focus on classroom management practices and emphasize the importance of effective strategies for supporting student learning. However, while Andrin's study investigates the correlation and variance in classroom management practices among elementary teachers, the current study specifically explores techniques employed by secondary teachers for

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students with special needs. Additionally, Andrin's research highlights specific areas where teachers may be lacking in practice, while the present study aims to identify successful strategies used in a different educational context. Thus, both studies contribute valuable insights into classroom management, yet they differ in their target populations and focus areas.

Additionally, the study of Cortes (2022)<sup>40</sup>, revealed that the main purpose of this study is to explore the special education teacher's classroom management strategies engagement in an inclusive virtual setting among the selected teachers in Region VII and one City in Region VIII during remote learning. Five respondents from two regions of Visayas were chosen using convenience and purposive sampling techniques. The online interview questionnaire was distributed to the respondents through Google forms and thematic analysis was used to analyze the data.

When comparing this study with the current research, both emphasize the significance of effective classroom management in fostering positive learning experiences for students with special needs. However, Cortes' study focuses specifically on the challenges and strategies related to managing an inclusive virtual classroom, while the present study examines classroom management techniques used by secondary teachers in traditional school settings for students with special needs. Additionally, Cortes highlights the impact of external factors on student engagement, which is a different focus from the present study's aim of identifying effective strategies and practices. Thus, while both studies address classroom management, they differ in their contexts—virtual versus traditional classroom settings—and the specific challenges they aim to explore.

Muega's (2016)<sup>41</sup> article investigates the understanding and engagement of schoolteachers, school administrators, and parents of children with special needs (CSN) in the implementation of inclusive education (IE). The study was designed to explore participants' concepts of IE and their involvement in its practice, as well as to determine if significant differences existed among the responses of different participant groups regarding their understanding and participation in IE. Utilizing grounded theory and quantitative analysis, the research collected data from 91 participants with firsthand knowledge and experience in inclusive schools in Quezon City, Metro Manila, Philippines, through a modified survey questionnaire. After completing open coding and addressing each qualitative research question, the findings revealed that participants did not challenge or resist the concept of inclusion within their general education environments. However, they expressed uncertainty about whether their understanding of IE aligned with widely accepted definitions and questioned the effectiveness of their practices in meeting the demands of highquality inclusive education. Additionally, no significant differences were found among the participants' average scores related to their knowledge and involvement in IE.

Both Muega's (2016) study and the present research focus on the implementation of inclusive education (IE), emphasizing the perspectives of key stakeholders, such as teachers, administrators, and parents, regarding their understanding and involvement in inclusive practices. Each study seeks to assess the effectiveness of inclusion and the confidence of participants in their roles within inclusive educational settings, employing qualitative and quantitative methods to gather data. However, a notable difference lies in the geographical context and specific participant demographics; Muega's research is conducted in Ouezon City, Philippines, while the present study may explore a different region or population. Additionally, while Muega found that participants generally accepted the practice of inclusion but expressed doubts about their knowledge and effectiveness, the present study may focus on specific strategies or practices that educators employ in fostering inclusivity, thereby providing a broader framework for understanding how inclusive education can be effectively implemented across various contexts.

The study by Bressan and Isola (2019)<sup>42</sup> examined the effects of psychomotor activities on the development of gross motor skills in preschool children, particularly in inclusive educational settings. This research emphasized how structured motor activities—such as balancing exercises, running, and movements—can coordinated significantly preschoolers' motor development. Such activities are shown to be beneficial for all children but are especially valuable in inclusive classrooms, where children with developmental needs can engage together in movement-based learning experiences. Psychomotor interventions in these settings not only support motor skills but also contribute to social and cognitive growth by promoting interaction, coordination, and focus, helping to bridge developmental gaps among students.

This focus on inclusivity through motor skills training aligns with the broader objectives of inclusive education, which seeks to create environments where children of all abilities can thrive collectively. Research on integrating motor skills into preschool routines suggests that such activities are adaptable and beneficial for children with disabilities and those at different developmental stages, as they provide equal opportunities for engagement and skill development, enhancing the overall learning experience in inclusive classrooms.

# IV. METHODOLOGY

This study utilized a descriptive-correlational method of research to ascertain facts and generate insights in determining the applications on classroom management techniques of secondary teachers in inclusive education.

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Descriptive research according to (McCombes, 2019) aims to describe a population, situation, or phenomenon accurately and systematically. It can answer what, where, when and how, questions. A descriptive research design can use a wide variety of research methods to investigate one or more variables. Its purpose is to observe and document aspects of a situation as it naturally occurs and sometimes to serve as a starting point for hypothesis generation or theory development.

### V. FINDINGS

The findings of the study were as follows:

- The combined frequencies of the two groups show that classroom routine and structure; and collaboration with others both obtained a frequency of 271 or 95.76 percent; safe space with 265 or 93.64; peer interaction with 255 or 90.11 percent; and social and emotional support with 254 or 89.75 percent.
- The overall average from the two groups of respondents on the level of application of classroom management techniques were: safe space with 4.80; peer interaction with 4.71; social and emotional support with 4.62; classroom routine and structure with 4.57; and collaboration with others with 4.28, having an average of 4.60. They were all adjectivally described as *always*.
- The computed value of F along classroom routine and structure is 0.80; safe space with 0.26; peer interaction with 1.11; collaboration with others has 2.10; and social and emotional support with 1.06. The computed values are all greater than the F-tabular value of 5.32 at 0.05 level of significance with 1 and 8 degrees of freedom, the null hypothesis is accepted.
- The average of the ratings from the two groups of respondents on the effects of classroom management techniques in inclusive education, affective has 4.73; cognitive with 4.68; and psychomotor with 4.61 with an overall average weighted mean of 4.67. All the numerical values mentioned were adjectivally described as very high.

Based on the sum of ranks from the two groups of respondents the identified problems along classroom routine and structure were the following: lack of access to diverse instructional materials and resources with two (2) as sum of ranks and considered as the first (1st) in the final rank; behavioral issues in classroom management with five (5) which was second (2nd) in rank; insufficient training in instruction implementation and difficulties on diverse interests and motivation level of students both with seven (7) which were 3.5th in rank; and accessibility of inclusive classroom activities with nine (9) the fifth (5th) in rank. However, on safe space, insufficient mental health resources with two (2) as sum of ranks was considered as the first (1st); challenging diverse learning needs of students with four (4), the second (2nd); awareness on addressing anti-bullying thru policies with six (6)

which is third (3<sup>rd</sup>); *inclusivity in teaching practices* with eight (8) which is fourth (4<sup>th</sup>); and *confidence in addressing bullying and discrimination* with ten (10) which was fifth (5<sup>th</sup>).

The problems on peer interaction were ineffective intervention in negative behavior with three (3) as sum of ranks which was first (1st); inadequate peer support systems with four (4) considered as second (2<sup>nd</sup>); difficulty in teaching conflict resolution with five (5) which was third (3<sup>rd</sup>); challenges in facilitating group work with eight (8), the fourth (4th) in rank; and lack of positive interaction encouragement with ten (10), the fifth (5th). However, along collaboration with others, the identified problems were limited collaboration with special education staff with the sum of rank of two (2) which was the first (1st); low participation in professional learning communities with four (4) which was second (2<sup>nd</sup>); insufficient communication with parents or guardians and infrequent team planning with colleagues both with seven (7) which were 3.5th in rank; and challenges in working with school counselors with ten (10), the fifth (5th) in rank.

In addition, along social and emotional support, the problems were *inconsistent emotional check-ins* with two (2) as sum of ranks which was considered as the first (1<sup>st</sup>) in the final rank; *handling social conflicts ineffectively* with four (4), the second (2<sup>nd</sup>); *creating a supportive environment; teaching emotional regulation*; and *difficulty on promoting empathy and respect through classroom activities*, all with eight (8) and considered fourth (4<sup>th</sup>) in the final rank.

 An action plan was presented to address the problems encountered on the application of classroom management techniques by secondary teachers in inclusive education.

# VI. CONCLUSIONS

The following conclusions were drawn:

- The classroom management techniques applied by the secondary teachers in inclusive education were *routine and structure*; *safe space*; *peer interaction*; *collaboration with others*; and *social and emotional support*.
- The level of application of classroom management techniques were described as *always* along *routine* and *structure*; *safe space*; *peer interaction*; *collaboration with others*; and *social and emotional support*.
- There is no significant difference on the level of application of classroom management techniques between the junior and senior high school teachers.
- The effects of classroom management techniques to the learners along cognitive, affective, and psychomotor were considered very high. Thus, There is no significant difference on the level of application of classroom management techniques between the junior and senior high school teachers.

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- The common problems of the teachers on the application of the classroom management techniques in inclusive education along classroom routine and structure was on *lack* of access to diverse instructional materials and resources; on safe space, insufficient mental health resources; on peer interaction, ineffective intervention in negative behavior; on collaboration with others, limited collaboration with special education staff; and on emotional support, inconsistent emotional check-ins.
- The researcher presented an action plan to address the problems encountered by the teachers on the application of the classroom management techniques in inclusive education.

#### RECOMMENDATIONS

Based on the findings and conclusions, the following recommendations are offered:

- The schools may develop and implement comprehensive training programs for teachers that focus specifically on enhancing social and emotional support within the classroom.
- The teachers may undergo targeted professional development aimed at improving culturally responsive teaching strategies and consistently tailoring their instructions to accommodate diverse learners to enhance the effectiveness of classroom management.
- Sustain the high levels of satisfaction and positive attitudes observed, the school should implement ongoing initiatives that promote a positive learning environment, strengthen community and belonging, enhance student self-esteem, foster strong relationships with peers and teachers, and continually adapt the classroom environment to meet students' needs.
- Establish ongoing professional development programs focused on classroom management strategies tailored for junior and senior high school settings. These programs should emphasize evidence-based practices that enhance student engagement and address the unique challenges of managing diverse learners in inclusive education environments.
- The problems encountered by the teachers on the application of classroom management techniques in inclusive education be addressed to ensure quality learning and provide significant outcomes.
- The plan of action presented by the researcher be used by the secondary schools especially the teachers in the application of classroom management techniques in inclusive education.

### AREAS FOR FURTHER STUDY

The following areas are recommended for further research:

- School Heads Monitoring and Evaluation Strategies on the Application of Classroom Management in Inclusive Education
- Innovative Classrooms for Inclusive Education and Its Effect to Students Learning
- Sustainability of Inclusive Education Program in Public Secondary Schools in Tabaco City Division.

#### REFERENCES

- [1]. UNICEF. (n.d.). *Inclusive education: Every child has the right to quality education and learning*. https://www.unicef.org/.
- [2]. A. Madhesh, The concept of inclusive education from the point of view of academics specialising in special education at Saudi universities. *Humanit Soc Sci Commun* **10**, 278 (2023). https://doi.org/10.1057/s41599-023-01802-y
- [3]. K. Malone, Strategies for Teaching Students with Disabilities. (2022). *Graduate Programs for Educators*. November 23, 2022. https://www.graduateprogram.org/2022/11/strategiesfor-teachingstudents-with-disabilities/\_Accessed January 16, 2023.
- [4]. C. S. Weinstein. (2016, August 30). Classroom Management. *Oxford Bibliographies Online Datasets*. https://doi.org/10.1093/obo/9780199756810-0155
- [5]. Ritu. Chandra, (2015). Classroom Management for Effective Teaching. International Journal of Education and Psychological Research (IJEPR). https://www.researchgate.net/publication/313889949\_Cl assroom\_Management\_for\_Effective\_Teaching. Accessed: February 27, 2024, 8:00 am.
- [6]. Franklin Hayley, & Ingrid, Harrington (2019). A Review into Effective Classroom Management and Strategies for Student Engagement: Teacher and Student Roles in Today's Classrooms. Journal of Education and Training Studies. 7. 1. 10.11114/jets.v7i12.4491. Accessed: February 27, 2024, 8:30 am.
- [7]. S. Polirstok, (2015). Classroom Management Strategies for Inclusive Classrooms. *Creative Education*, 06(10), 927–933. https://doi.org/10.4236/ce.2015.610094
- [8]. J.Lathan, PhD. (2024, April 16). 4 Strategies for Inclusive Education [+ 6 resources]. University of San Diego Online Degrees. https://onlinedegrees.sandiego.edu/inclusive-educationstrategies/

- [9]. H. Sanir, Karakoç, T., & Özkubat, U. (2022). Teaching Practices in Inclusive Classrooms from the Perspective of Primary School Teacher Candidates: An Observation Study. *International Journal of Psychology and Educational Studies*, 9(4), 1244–1256. https://doi.org/10.52380/ijpes.2022.9.4.878
- [10]. S. Thornbury, (2022). Classroom Management Techniques. https://youre.vn/wp-content/uploads/2022/05/Classroom-mangement techniques.pdf
- [11]. Popeska, Mitevska Petrusheva, Katerina &, Biljana. (2023). Classroom ManagementPractices: Methods and Approaches Applied for the Purpose of Student's Personal Development. International Journal of Social Science and Human Research. 6. 10.47191/ijsshr/v6-i12-81.
- [12]. J.L.Donath, T. Lüke, E. Graf, et al. Does Professional Development Effectively Support the Implementation of Inclusive Education? A Meta-Analysis. Educ Psychol Rev 35, 30 (2023). https://doi.org/10.1007/s10648-023-09752-2
- [13]. What is inclusive education, and how can you implement it? (2021, October 22). FutureLearn. https://www.futurelearn.com/info/blog/what-is-inclusive-education.
- [14]. M. T. F. Calderon, Effective Classroom Management. August 13, 2019. http://www.classroommanagement101.com/\_\_Accessed: February 10, 2024. 1:00 pm.
- [15]. Ray T. Obispo (2021). International Journal of Learning, Teaching and Educational Research Vol. 20, No. 5, pp. 123-141, May 2021 https://doi.org/10.26803/ijlter.20.5.7
- [16]. V.J, Sanchez. The Impact of General Education Teacher's Classroom Management and Teaching Strategies to Learners with Special Educational Needs in an Inclusive Classroom. International Journal of Arts, Sciences and Education ISSN: 2799 1091 Volume 4 Issue 1 | March 2023 Page No. 1-19
- [17]. Raymund Jr. Manzalo Apalla. Classroom Management in Filipino Class, Why It Matters. Sun Star Pampanga Press Reader.

  https://www.pressreader.com/philippines/sunstarpampanga/20201018/281603832947564. Accessed: February 27, 2024, 10:00 am.
- [18]. G. Andrin, (2021). CLASSROOM MANAGEMENT PRACTICES AMONG GRADE SCHOOL TEACHERS IN a PUBLIC SCHOOL DISTRICT. European Journal of Humanities and Educational Advancements (EJHEA), 2(10).
- [19]. F.Camingao, (2024). Effective approaches to inclusive classroom management in special education settings. World Journal on Education and Humanities Research, 4(3). https://www.wjehr.com/\_\_static/8b6742772c58d4558e4e 11357e0b7536/effective-approaches-to-inclusive-

- classroom-management-in-special-education-settings.pdf?dl=1
- [20]. Juniesy Estanislao, (2023, September 25). *Toward inclusive education | Inquirer Opinion*. INQUIRER.net. https://opinion.inquirer.net/166559/toward-inclusive-education
- [21]. Corcelles, R. D., Almonte, C. J., Valdehueza, R. R., Pagalan, R. T. & Maloloy-on, M. C. (2020). The Impact of Classroom Management Approaches of Secondary Teachers. SMCC Higher Education Research Journal (Teacher Education Journal), 2(1).
- [22]. M. F. Gaspar, J.Patras, and (2022, April 25). Effects of a Teacher Classroom Management program on preschool teachers' practices and psychological factors: A randomized trial with teachers of children from economically disadvantaged families. *Early Education and Development*, 34(3), 626–647. https://doi.org/10.1080/10409289.2022.2063612
- [23]. Elvey, M., Burke, J. (2023). Implementing Inclusive Pedagogies: What Regular Primary Classroom Teachers Know and Do. In: Weuffen, S., Burke, J., Plunkett, M., Goriss-Hunter, A., Emmett, S. (eds) Inclusion, Equity, Diversity, and Social Justice in Education. Sustainable Development Goals Series. Springer, Singapore. https://doi.org/10.1007/978-981-19-5008-7\_14
- [24]. E. I. Maphie, (2024). Implementation of inclusive education in Tanzania secondary schools: placements and supports for students with disabilities. *International Journal of Inclusive Education*, 1–18. https://doi.org/10.1080/13603116.2024.2348494
- [25]. Madhesh, A. The concept of inclusive education from the point of view of academics specializing in special education at Saudi universities. *Humanit Soc Sci Commun* 10, 278 (2023). https://doi.org/10.1057/s41599-023-01802-y
- [26]. M.Andreoli, L. Ghirotto, J. Kurth, & A. Lascioli, (2024). Achieving teacher agency for inclusive education: an exploration of general education teachers' perspective. *International Journal of Inclusive Education*, 1–18. https://doi.org/10.1080/13603116.2024.2397458
- [27]. Y.Zheng, & M. Han, (2024). Inclusive education in the language classroom: an investigation into the portrait of gender in language textbooks. *International Journal of Inclusive Education*, 1–15. https://doi.org/10.1080/13603116.2024.2389968
- [28]. C. A. Webster, J. E. Rink, R. L. Carson, J. Moon, & K. L. Gaudreault, (2020). The Comprehensive School Physical Activity Program model: a proposed illustrative supplement to help move the needle on youth physical activity. *Kinesiology Review*, 9(2), 112–121. https://doi.org/10.1123/kr.2019-0048
- [29]. O, Kofa. (2023) Occupational stress in mainstream and special needs primary school teachers and its relationship with self-efficacy, Educational Studies, 49:1, 200-217, DOI: 10.1080/03055698.2020.1837080

- [30]. Gyasi, Mercedes. (2020). Teachers' Knowledge of Special Educational Needs and Disability Students and Their Classroom Management Approaches. World Journal of Education, v10 n4 p160-172 2020. https://eric.ed.gov/?id=EJ1266948 Accessed: February 27, 2024, 11:16 am.
- [31]. Mohammad Muswari. (2023). Analysis of Classroom Management in Learning Quality, Affective Support and Cognitive Activation at Junior High School. Vol 15, No 3 (2023). https://www.journal.staihubbulwathan.id/index.php/alish lah/article/view/2928 Accessed: February 27, 2024 11:29 am.
- [32]. M.Montanero, A. M. Mayo, R. Borrero, M. Fernández-Sánchez, & Á. Carmona, (2024). Peer tutoring as a strategy for inclusive education in primary education: a case study. *International Journal of Inclusive Education*, 1–23. https://doi.org/10.1080/13603116.2024.2352469
- [33]. V.J, Sanchez. The Impact of General Education Teacher's Classroom Management and Teaching Strategies to Learners with Special Educational Needs in an Inclusive Classroom. International Journal of Arts, Sciences and Education ISSN: 2799 1091 Volume 4 Issue 1 | March 2023 Page No. 1-19
- [34]. N.G. Gonzaga, (2024). Readiness And Challenges of General Education Teachers on The Implementation of Inclusive Education. Vol. 12 No. 1 (2024). https://doi.org/10.52783/rlj.v12i1.3534
- [35]. R. D. Gallardo & R. D. Cañete (2019). Students With Special Needs In The Mainstream Classroom: Voices Of Teachers In The Public School. Southeast Asian Journal Of Educational Management, 1(1).
- [36]. Obliopas, R. G. (2018). Classroom Management Strategies Implementation, Usefulness, and Issues. *IAMURE International Journal of Multidisciplinary Research*, *17*(1). Accessed: February 27, 2024, 10:47 am.
- [37]. R. D.Corcelles, C. J.Almonte, R. R. Valdehueza, R. T. Pagalan, & Maloloy-on, M. C. (2020). The Impact of Classroom Management Approaches of Secondary Teachers. SMCC Higher Education Research Journal (Teacher Education Journal), 2(1).
- [38]. Genesis B. Naparan, (2021) Vivian G. Alinsug.Classroom strategies of multigrade teachers, Social Sciences & Humanities Open, Volume 3, Issue 1,2021. 100109, ISSN 2590-2911. https://doi.org/10.1016/j.ssaho.2021.100109.(https://www.sciencedirect.com/science/article/pii/S2590291121000 05X)
- [39]. G. Andrin, (2021). CLASSROOM MANAGEMENT PRACTICES AMONG GRADE SCHOOL TEACHERS IN a PUBLIC SCHOOL DISTRICT. European Journal of Humanities and Educational Advancements (EJHEA), 2(10)

- [40]. Venus Cortes, & Arjie Montero, & Mylene Iligan, & Donnameir Santillan, & Stephanie Undalok,. (2022). Teacher Classroom Management Practices in an Inclusive Virtual Setting. Journal of Humanities and Education Development. 4. 126-133. 10.22161/jhed.4.3.15.
- [41]. M. A.Muega, (2016). Inclusive education in the Philippines: through the eyes of teachers, administrators, and parents of children with special needs. *University of the Philippines* (*U.P.*) *Diliman Journals Online*. https://www.journals.upd.edu.ph/index.php/socialscience diliman/article/download/5230/4700/
- [42]. E. S., Bressan, & J. Isola, (2019). Effects of psychomotor activities on the development Of gross motor skills in preschool children. Bressan, E. S., & Isola, J. (2019).
- [43]. Classroom Management Theorists and Theories/Alfie Kohn Wikibooks, open books for an open world. (n.d.). https://en.wikibooks.org/wiki/Classroom\_Management\_ Theorists\_and\_Theories/Alfie\_Kohn#:~:text=Kohn% 20b elieves% 20that% 20if% 20the, cooperation% 20should% 20 govern% 20the% 20classroom.
- [44]. L. S. Vygotsky, (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- [45]. A. H. Maslow, (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. https://doi.org/10.1037/h0054346
- [46]. T.Harland, (2003). Vygotsky's Zone of Proximal Development and Problem-based Learning: Linking a theoretical concept with practice through action research. *Teaching in Higher Education*, 8(2), 263–272. https://doi.org/10.1080/1356251032000052483