

Predictive Influence of Teacher Challenges and School Head Support on Teaching Effectiveness in Multigrade Classrooms in Lingig I District, Division of Surigao Del Sur; A Descriptive-Correlational Study

Manuel Cutamora
Mansailao Elementary School
rioconsign82@gmail.com

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ABSTRACT

Multigrade education remains a vital instructional modality in geographically isolated and disadvantaged communities in the Philippines, where low enrolment and limited resources make monograde classes impractical. However, multigrade teaching presents complex instructional demands that may affect teaching effectiveness, particularly in contexts with constrained support systems. This study, titled “Teacher Challenges and School Head Support as Predictors of Teaching Effectiveness in Multigrade Classrooms in Lingig I District, Division of Surigao del Sur,” aimed to determine the levels of teacher challenges, school head support,

and teaching effectiveness, as well as to examine the relationships among these variables. Employing a quantitative descriptive–correlational research design, the study involved multigrade teachers from nine identified multigrade schools in Lingig I District. Data were gathered using structured survey questionnaires and analyzed through descriptive statistics (frequency, percentage, weighted mean, and standard deviation) and inferential statistics using Pearson Product–Moment Correlation Coefficient at a 0.05 level of significance. Teacher challenges were examined in terms of instructional planning and time management, classroom management and learner diversity, assessment and record-keeping, and availability of learning resources and facilities, while school head support was assessed in terms of instructional supervision and coaching, professional development support, resource mobilization and logistical support, and psychosocial and motivational support. Teaching effectiveness was measured across lesson delivery and differentiated instruction, classroom organization and learning environment, learner engagement and support, and assessment practices and feedback. Findings of the study provide empirical, district-level evidence on how teacher challenges and school head support are related to teaching effectiveness in multigrade classrooms. The results are expected to inform school-based planning, instructional supervision, and leadership interventions aimed at strengthening multigrade teaching in geographically isolated and disadvantaged contexts.

Keywords: *multigrade teaching, teacher challenges, school head support, teaching effectiveness, descriptive-correlational study*

INTRODUCTION

Ensuring equitable access to quality basic education remains a persistent global challenge, particularly in geographically isolated and disadvantaged communities where low enrolment, difficult terrain, and limited infrastructure make traditional, age-graded classroom organization impractical. In many low- and middle-income countries, multigrade schooling—where one teacher concurrently handles two or more curriculum grade levels in a single classroom—has been a necessary strategy to sustain school operations and prevent learner exclusion in remote settings. Although global comparative data on the prevalence of multigrade classes remain uneven, research indicates that multigrade instruction continues to be a significant feature of educational provision in both developing and some industrialized contexts, particularly in sparsely populated rural areas, and forms a part of the international agenda to achieve Education for All (EFA) and Sustainable Development Goal 4 on inclusive, equitable, quality education.

Within the Association of Southeast Asian Nations (ASEAN), multigrade instruction similarly functions as a systemic strategy for increasing rural access. In countries like Vietnam, there were an estimated 8,404 multigrade classes across 49 provinces; Cambodia reported approximately 1,353 multigrade schools; and Timor-Leste counted 135 multigrade primary schools as part of its rural education delivery system. Indonesia exhibited a particularly high incidence of multigrade schools in remote regions due to teacher shortages and geographical dispersion.

In the Philippines, multigrade education has been formally institutionalized through the Multigrade Program in Philippine Education (MPPE) since 1993 as part of the government's strategy to democratize access to schooling where enrolment levels do not justify monograde classes.

National data illustrate that multigrade schools continue to represent a substantial segment of the elementary education system: in School Year (SY) 2017–2018, 7,234 out of 38,911 public elementary schools nationwide (18.6 percent) were classified as multigrade schools, meaning nearly one in five public elementary schools operated primarily under a multigrade configuration.

More recent data for SY 2022–2023 indicate that 5,870 public schools offered pure or mixed multigrade classes, accounting for approximately 12 percent of all public schools in the country. These schools served 277,908 learners and engaged 28,364 teachers in multigrade instructional settings.

Geographically, multigrade schooling in the Philippines tends to be concentrated in regions with dispersed population settlements and high rurality: for example, Eastern Visayas accounted for about 22 percent of multigrade schools, the Cordillera Administrative Region for 10 percent, and Cagayan Valley for 7 percent of total national multigrade schools. This distribution underscores how multigrade education remains a core strategy in addressing educational exclusion in geographically isolated and disadvantaged areas (GIDA) and rural contexts.

While multigrade classes are vital for sustaining educational access, they intensify instructional demands on teachers. Multigrade teachers must plan lessons, deliver differentiated instruction, manage simultaneous learning activities, and assess pupils across multiple grade levels—often with limited instructional materials, constrained classroom space, and poor access to electricity, internet connectivity, and educational technologies. DepEd-UNICEF-SEAMEO INNOTECH studies situate these demands within broader contextual barriers that include not only geographic isolation but also pedagogical isolation, characterized by limited instructional supervision and professional development support.

These instructional challenges are closely linked to the conditions of Last Mile Schools, which DepEd identifies as remote sites that typically lack standard classrooms, electricity, and sufficient teaching staff and serve fewer than 100 learners—often with a high proportion (over 75 percent) of Indigenous

Peoples learners. In response to persistent disparities, the department introduced the Last Mile Schools Program, prioritizing the delivery of classrooms, utilities, and learning resources to the most disadvantaged locations, recognizing that school context significantly affects instructional quality, teacher performance, and learner outcomes.

Within multigrade settings, the role of school leadership becomes particularly critical. Instructional leadership and school head support—such as systematic classroom observation with feedback, mentoring and coaching, facilitation of professional development, and strategic resource mobilization—are consistently associated in the research literature with improved teaching practices and school effectiveness. Studies in educational leadership emphasize that school heads shape the professional learning environment for teachers and influence how instructional challenges are mitigated or exacerbated. Effective leadership is therefore especially significant in multigrade classrooms, where complex instructional demands intersect with contextual constraints.

Despite national policies and programs supporting multigrade education, there remains a need for empirical, district-level evidence that examines how teacher challenges and school head support interact to influence teaching effectiveness. Much of the existing literature either focuses on teacher difficulties or on leadership practices in isolation, with limited quantitative evidence that integrates these variables within the same analytical framework, particularly in rural district contexts.

Against this backdrop, the present study entitled “Teacher Challenges and School Head Support as Predictors of Teaching Effectiveness in Multigrade Classrooms in Lingig I District, Division of Surigao del Sur: A Descriptive–Correlational Study” employs a quantitative descriptive–correlational design to (1) describe the levels of teacher challenges, school head support, and teaching effectiveness in multigrade classrooms; and (2) determine whether teacher challenges and school head support significantly predict teaching effectiveness. Descriptive–correlational research is appropriate when the objective is to quantify variables, examine relationships, and make statistical predictions without manipulating conditions. The findings are expected to generate locally grounded evidence to inform school-based planning, instructional supervision, and district-level support strategies aimed at strengthening multigrade teaching and learning in geographically isolated and disadvantaged contexts.

Review of Related Literature and Studies

Globally, multigrade (MG) teaching has been widely examined as both a pragmatic response to low enrolment in rural and remote communities and a pedagogical approach with distinct instructional implications. International literature consistently recognizes multigrade education as a necessary organizational strategy in geographically isolated and resource-constrained contexts, particularly in developing countries where maintaining monograde classes is neither feasible nor cost-effective (Little, 2006; UNESCO, 2015). Multigrade classrooms, defined as learning environments where a single teacher simultaneously instructs two or more grade levels, are prevalent across Asia, Africa, and Latin America, and continue to serve as a key mechanism for ensuring educational access and equity in underserved populations.

Recent global syntheses provide updated empirical grounding for these claims. A systematic review published in *Education Sciences* screened 273 records and synthesized 40 peer-reviewed international studies (2019–2024) indexed in Scopus, ERIC, and Web of Science. The review reported recurring advantages of multigrade instruction, including enhanced peer learning, learner autonomy, cross-age

tutoring, and curriculum contextualization. However, it also documented persistent challenges such as increased teacher workload, complex lesson planning across curricula, limited multigrade-adapted instructional materials, and weak institutional support systems, particularly in rural settings. The review concluded that without sustained professional development and structured leadership support, the potential benefits of multigrade education are often overshadowed by implementation constraints (Ares-Ferreirós, 2025).

International studies examining learning outcomes in multigrade settings present nuanced findings. One of the most cited meta-analytical reviews by Veenman (1996), published in the Review of Educational Research, reanalyzed international achievement studies and found weighted average effect sizes close to zero, indicating no significant difference in academic performance between multigrade and monograde pupils when contextual factors are controlled. In contrast, Mason and Burns (1996) reported small but negative effects in multigrade classrooms after accounting for selection bias, arguing that the instructional complexity of teaching multiple grade levels may negatively affect both teacher effectiveness and student outcomes if adequate support is lacking. These contrasting findings reinforce a central conclusion in global scholarship: multigrade education is not inherently inferior, but its success is highly contingent on teacher preparation, instructional resources, and leadership support.

Large-scale international reform initiatives further demonstrate how multigrade education can succeed under favorable conditions. The Escuela Nueva model in Colombia remains one of the most extensively studied multigrade interventions worldwide. Evaluations involving more than 3,000 Grade 3 and Grade 5 learners across 168 multigrade schools compared with 60 traditional schools found significantly higher achievement in Spanish and Mathematics, lower dropout rates, and stronger civic participation among Escuela Nueva students (Psacharopoulos, Rojas, & Velez, 1993). By 1989, the program had expanded to 17,948 schools, serving nearly 800,000 children, illustrating the scalability of multigrade education when supported by structured learning guides, teacher training, and community engagement mechanisms (Colbert & Arboleda, 1990). Similar replications in Guatemala reported higher completion rates among multigrade learners compared to those in traditional schools, particularly for girls, further supporting the model's effectiveness in marginalized contexts.

International policy-oriented literature complements these empirical findings by identifying key conditions for successful multigrade implementation. UNESCO and World Bank publications emphasize instructional strategies such as flexible grouping, independent learning stations, self-directed learning materials, and localized curricula, which allow teachers to manage multi-level instruction more effectively (UNESCO, 2015; World Bank, 2007). These approaches are typically supported through structured training programs, peer-learning micro-centers, and standardized instructional guides. Although training costs for multigrade teachers are often higher than those for monograde teachers, World Bank analyses note that overall unit costs remain relatively low due to efficiencies in teacher deployment and school operations, making multigrade education a cost-effective solution in sparsely populated areas.

At the system level, international studies highlight that challenges in multigrade education often stem from policy, financing, deployment, and supervision issues rather than pedagogy alone. A World Bank sector analysis of rural education in Peru revealed that despite a national pupil-teacher ratio of approximately 26:1, multigrade schools remained underserved due to weak deployment incentives, limited instructional supervision, and misalignment between teachers' linguistic backgrounds and community needs. Nearly 30% of teachers spoke a mother tongue other than Spanish, yet deployment practices did not consistently consider linguistic compatibility, further complicating instruction in multigrade classrooms (World Bank, 2007). These findings underscore that effective multigrade education requires coherent system-level support alongside classroom-level strategies.

Overall, international literature and studies converge on the view that multigrade education is a viable and often effective instructional arrangement for improving access to education in rural and disadvantaged contexts. However, its success depends heavily on the extent to which teacher challenges are mitigated through adequate preparation, instructional resources, and strong school leadership support. This global evidence base provides a critical foundation for examining multigrade teaching at the district level and for investigating how teacher challenges and school head support jointly influence teaching effectiveness in multigrade classrooms.

Instructional Planning and Time Challenges in Multigrade Classrooms

Multigrade classrooms constitute a significant component of basic education systems worldwide, particularly in rural, sparsely populated, and disadvantaged areas where low enrolment makes conventional single-grade classes impractical. It is estimated that approximately 30 percent of students globally learn in schools characterized by multigrade arrangements or where teachers manage more than one grade level concurrently, a figure underscored by international monitoring and educational analyses that highlight the prevalence of multigrade teaching as part of efforts to expand global access to schooling in low-enrolment contexts (Little, 2006; UNESCO, 2007).

Within this global landscape, multigrade configurations are found not only in low- and middle-income regions but also in high-income countries: for example, one in four elementary students in parts of Canada historically attended combined classrooms, while multigrade classes have represented approximately one fifth to one third of primary school classes in Europe and Australia, indicating the widespread persistence of multigrade teaching beyond developing contexts.

International research consistently identifies instructional planning and time management as core challenges for teachers in multigrade classrooms. A systematic review of multigrade studies spanning multiple continents reveals that teachers frequently confront the complex task of concurrently preparing differentiated lesson plans, adapting curricula for diverse age and ability groups, and allocating limited instructional time equitably across grade levels, often without adequate institutional support or context-specific professional training (Bernárdez-Gómez, 2025). Similarly, qualitative research on teachers' experiences across Africa, Asia, and Europe reports that the absence of clear curriculum guidelines and tailored pedagogical preparation exacerbates workload pressures related to planning and organizing multigrade instruction, leading many educators to describe their work as both “complex” and “overwhelming.”

These challenges are not merely administrative but have instructional implications: because traditional education systems and teacher preparation programs are structured around monograde norms, multigrade teachers frequently lack access to dedicated training in differentiated planning, time allotment strategies, and multigrade-specific assessment methods, necessitating extended preparation time outside of scheduled school hours to ensure learning continuity for all students. Moreover, the global literature highlights that in many contexts—particularly where multigrade schools exist by necessity rather than design—teachers shoulder multiple professional roles simultaneously, which further elevates the time demands associated with lesson preparation, classroom organization, and student monitoring.

Despite the recognized pedagogical opportunities of multigrade teaching, such as fostering peer learning and contextualized instruction, the time and planning challenges documented across international studies underscore the importance of institutional support, targeted teacher preparation, and context-

responsive curriculum frameworks if multigrade classrooms are to achieve equitable and effective learning outcomes on a global scale.

In the broader Southeast Asian context, multigrade classrooms are a common feature in rural and low-enrolment areas, where limited student numbers and constrained resources necessitate that one teacher manage multiple grade levels simultaneously. Across ASEAN countries, research on multigrade teaching highlights instructional planning and time management as core pedagogical challenges, often intertwined with broader systemic constraints such as insufficient training, limited instructional materials, and heavy workloads. A thematic analysis of multigrade teacher research reveals that one of the most frequently reported challenge categories is time constraints and workload—including the preparation of multiple lesson plans, individualized instruction, and differentiated learning activities for heterogeneous learners—suggesting that these are not isolated issues but pervasive features of multigrade contexts across member states. This systematic review identified time constraints and workload as one of eight major themes common in multigrade teaching research, reflecting the consistent difficulty teachers face when aligning and balancing the instructional requirements of different grades within a shared timetable structure (systematic review).

Within ASEAN, studies also point to the lack of specialized professional development in multigrade instructional design as a compounding factor in time management difficulties. In contexts where teacher preparation is oriented toward monograde classrooms, educators struggle to adapt materials, pace instruction, and synchronize activities across grade levels without tailored curricula or institutional guidance, further stretching the limited instructional time available in a typical school day. Although ASEAN-specific prevalence percentages on instructional time challenges are not yet widely reported in regional comparative statistics, qualitative evidence from the region underscores the ubiquity of planning pressures and the prominence of time as a constraint on both teacher workload and instructional quality (regional review).

In the Philippine context, evidence from both qualitative and mixed-methods studies complements the ASEAN literature by illustrating how instructional planning and time management challenges manifest in local multigrade classrooms. A recent Philippine case study on multigrade time management reveals that teachers employ strategic planning, collaboration, and adaptability to meet the simultaneous demands of multiple grade levels, yet still confront significant time-related challenges, including balancing diverse learner needs with limited instructional minutes, resource constraints, and logistical difficulties inherent in rural settings. These findings emphasise the critical role of targeted professional development and institutional support in enhancing teachers' time management capacities and the overall quality of multigrade instruction.

Further Philippine research corroborates these findings. Studies of multigrade teachers in regions such as Albay and western parts of the country report that problems with lesson planning, conflict between curriculum pacing and grade groupings, and increased instructional workload are among the recurring challenges in multigrade settings, often resulting from inadequate training, insufficient learning materials, and the absence of ready-made lesson guides tailored to multigrade contexts. These challenges are especially acute when teachers must allocate time equitably across grade levels while ensuring the delivery of differentiated instruction, a task that is repeatedly identified as a central professional stressor in multigrade literature.

Collectively, ASEAN and Philippine research indicate that instructional planning and time management are persistent, interrelated challenges in multigrade education. These challenges reflect not

only the inherent complexity of coordinating multiple curricular strands within a single classroom schedule but also the consequences of policies and teacher preparation systems that have historically prioritised monograde models. Addressing these issues through systematic support mechanisms—such as context-responsive training, multigrade-specific lesson frameworks, and enhanced school leadership strategies—remains essential for improving instructional effectiveness and sustaining equitable learner outcomes in multigrade settings across both ASEAN and Philippine contexts.

Multigrade Classroom Management and Learner Diversity

Global to Philippine Perspectives At the global level, multigrade classrooms remain a persistent feature of educational systems in geographically dispersed, low-enrolment, and resource-constrained settings, with estimates suggesting that upwards of 30 percent of primary schools worldwide employ multigrade instructional arrangements, particularly in rural and marginalized regions where maintaining monograde classes is not feasible (Little, 2006; UNESCO, 2007). Within these multigrade contexts, classroom management and learner diversity emerge as central pedagogical challenges because teachers are required to concurrently orchestrate learning activities for students of different ages, developmental stages, and curricular content needs within a single learning environment (Bernárdez-Gómez et al., 2025).

International systematic reviews identify the complexity of organizing heterogeneous student groups and balancing behavioural expectations as recurrent themes, reporting that teachers frequently struggle to design and implement classroom routines, differentiated grouping strategies, and engagement practices that address the diverse cognitive and socio-emotional needs inherent in multigrade settings (Bernárdez-Gómez et al., 2025). Such diversity amplifies classroom management demands, often leading teachers to adopt improvisational approaches in the absence of multigrade-specific training or institutional frameworks that support differentiated instruction and structured behaviour management (Little, 2006; Bernárdez-Gómez et al., 2025).

Within the ASEAN region, similar patterns are documented in both policy research and empirical studies. Southeast Asian multigrade literature consistently underscores that classroom management becomes more complex and time-intensive when teachers must address the simultaneous behavioural, academic, and emotional needs of learners spanning multiple grade levels.

Reviews of ASEAN multigrade studies note that the integration of age and ability diversity necessitates frequent adjustments in pacing, task allocation, and supervisory roles, leading teachers to report heightened stress related to controlling classroom dynamics while attending to the unique needs of each learner group (Recla & Potane, 2024). In contexts such as rural Malaysia and Indonesia, teachers have described the challenge of sustaining learner engagement across different academic levels, as well as difficulties in establishing classroom routines that facilitate independent learning without constant direct supervision—an issue compounded by large class sizes and limited instructional resources that are common in remote ASEAN schools (Recla & Potane, 2024; SEAMEO INNOTECH, 2020).

Assessment and Record-Keeping Challenges in Multigrade Classrooms

Across global educational contexts, multigrade classrooms present distinctive challenges related to student assessment and record keeping, which are compounded by the need to evaluate multiple grade levels

simultaneously using tools and frameworks originally designed for monograde settings. International research demonstrates that assessment complexity in multigrade contexts arises from the need to tailor evaluative criteria to diverse learner ability levels, monitor progress for different curricular strands, and maintain accurate records of individual learning trajectories—tasks that require specialized skills and significant additional effort from teachers, yet are seldom supported by requisite training or policy guidance (Aliaga-Rojas & Del Pino, 2024; systematic review).

Systematic analyses of international multigrade literature confirm that the absence of specific assessment frameworks and tools for multigrade classrooms further complicates teachers' ability to maintain coherent, level-appropriate records of learner performance and to report progress in ways that align with standard reporting expectations.

Moreover, broader reviews note that in many countries multigrade teachers are expected to apply mono-grade assessment protocols despite the unique demands of multigrade instruction, resulting in increased workload, inconsistent monitoring practices, and potential gaps in learners' documented achievement (ERIC feedback study).

Within the ASEAN region, similar patterns of assessment and record-keeping challenges are reported in both national case studies and regional research syntheses. ASEAN multigrade studies emphasise that teachers must simultaneously design, administer, score, and record assessments for multiple competencies across grade levels without differentiated instruments or clear procedural guidance tailored to multigrade contexts, thereby elevating the complexity of documentation tasks and contributing to administrative overload. Regional reports highlight that this issue is particularly pronounced in rural and remote schools where literacy and numeracy assessments must be adapted on the fly to heterogeneous student needs, yet formal record-keeping systems remain rooted in monograde norms.

These systemic gaps in multigrade assessment practices underscore the need for context-sensitive frameworks and professional development that equip teachers with the competencies to assess and record learning outcomes effectively across diverse grade groups. In the Philippine context, empirical research corroborates international and ASEAN findings, illustrating how multigrade teachers experience heightened challenges in monitoring, assessing, and documenting learner progress across grade levels due to inadequate assessment tools and guidelines. Philippine studies note that multigrade teachers often resort to creating ad hoc assessment instruments, manually tracking individual learner performance, and managing voluminous record keeping—all within the constraints of limited time, resources, and training.

Local qualitative research also reports that meticulous record keeping—encompassing test scoring, performance portfolios, and performance reports for learners at different grade levels—adds significant administrative workload, particularly in smaller schools where teachers are assigned multiple ancillary roles in addition to instructional duties. Furthermore, Philippine research suggests that assessment practices in multigrade classrooms during periods such as the COVID-19 pandemic involved even more complex arrangements of modular assessments and remote feedback mechanisms, which required teachers to adapt traditional assessment practices without formal systemic support.

Learning Resources and Facilities in Multigrade Classrooms

Globally, studies of multigrade classrooms consistently identify limited availability of learning resources and inadequate facilities as significant barriers to effective instruction, particularly in rural, low-enrolment settings where multigrade schooling is most prevalent. Research spanning diverse

geographic contexts documents that teachers in multigrade environments often work with insufficient textbooks, age-appropriate instructional materials, manipulatives, and technology, which undermines both engagement and learning outcomes (Carrete-Marín et al., 2024; Brown et al., as cited in literature synthesis). Systematic international reviews note that the scarcity of didactic resources tailored for multigrade classrooms is a recurrent theme across studies of rural education, highlighting the additional workload placed on teachers who must adapt generic materials or create their own resources to serve multiple grade levels effectively (Carrete-Marín et al., 2024; Course Hero systematic review).

This situation is particularly acute in low- and middle-income regions where infrastructure deficits—such as lack of reliable electricity, functional classrooms, and learning centres—further constrain the delivery of quality education in multigrade settings, contributing to persistent global learning gaps documented in international education research.

Within the ASEAN region, similar challenges are reported across countries where multigrade schooling is practiced as a strategy to sustain access in remote areas. A regional systematic review found that multigrade teachers frequently manage classrooms with limited physical resources, such as a single shared chalkboard or minimal manipulatives, which complicates instructional differentiation and reduces opportunities for hands-on learning (Okamoto & Potane, 2020). Additional ASEAN research highlights that the integration of technology and varied instructional media remains uneven and constrained by inconsistent policy support and inadequate funding, despite efforts by ministries of education and development organisations to expand access to digital learning tools (UNICEF/DepEd partnerships).

In many Southeast Asian multigrade classrooms, the absence of movable boards, visual aids, and curriculum-specific learning kits signals a systemic gap in resource provisioning that intersects with broader inequalities in educational infrastructure. In the Philippine context, the challenge of limited learning resources and facilities in multigrade classrooms is well documented across national and local studies. Qualitative research in remote Philippine multigrade schools reveals that teachers and learners often have inadequate access to textbooks, instructional materials, and quality classroom environments, forcing teachers to improvise or rely on outdated supplies while grappling with socio-economic and environmental constraints (local phenomenological study).

National data and policy analyses also point to persistent deficiencies in school infrastructure—including classroom space, learning centres, potable water, and reliable electricity—which disproportionately affect multigrade schools located in geographically isolated and disadvantaged areas (nationwide multigrade profile survey). Initiatives such as UNICEF’s School-in-a-Bag project attempt to address some aspects of this gap by providing portable digital learning tools; however, these interventions underscore the persistent need for systemic improvements in the provisioning of teaching and learning resources that are essential for meaningful instruction in multigrade contexts (UNICEF Philippines). Collectively, evidence from global, ASEAN, and Philippine sources underscores that the availability of learning resources and adequate facilities is a foundational challenge in multigrade education. These deficits not only heighten the cognitive and logistical demands on teachers but also limit opportunities for differentiated instruction, hands-on learning, and technology-enhanced pedagogy, thereby reinforcing structural inequities in educational quality for students in isolated and under-resourced communities.

Taken together, the global, ASEAN, and Philippine literature indicates that assessment and record keeping are persistent, interrelated challenges for multigrade teachers. These challenges stem from inadequate multigrade-specific assessment tools, monograde-oriented reporting systems, and the additional cognitive and administrative burden of documenting learner progress across multiple grade levels. Addressing these concerns through tailored assessment frameworks, professional development in assessment literacy, and institutional support for record-keeping practices is essential to improving

instructional effectiveness and ensuring accurate, meaningful documentation of learning outcomes in multigrade settings.

The Philippine literature further reinforces these global and regional insights, illustrating how classroom management and learner diversity intersect to shape the everyday experiences of multigrade teachers. National studies, including the Department of Education-UNICEF-SEAMEO INNOTECH situation analysis, report that Filipino multigrade teachers regularly contend with behavioural heterogeneity, varying levels of prior knowledge, and divergent language proficiencies within the same class, all of which complicate the establishment of stable classroom routines and equitable instructional engagement for all learners (Department of Education, UNICEF, & SEAMEO INNOTECH, 2019). Local quantitative and qualitative investigations echo this portrayal, showing that multigrade teachers often resort to strategies such as peer tutoring, differentiated seat work, and rotational group activities to manage diverse learner needs; however, these adaptations frequently fall short in addressing persistent behavioural disruptions and uneven participation, especially in schools lacking adequate training support and teaching materials tailored for multigrade environments (Bunglay & Cutab, 2025; International Care Ministries College, 2023).

Philippine studies also highlight that learner diversity in multigrade classrooms is exacerbated by contextual factors such as socio-economic disparities, linguistic variation among learners, and uneven parental engagement, which collectively intensify classroom management demands and place additional burdens on teachers' instructional capacity (Bunglay & Cutab, 2025; International Care Ministries College, 2023). Across global, ASEAN, and Philippine settings, the evidence indicates that classroom management and learner diversity are not peripheral concerns but rather core challenges that shape the effectiveness of multigrade instruction.

These challenges underscore the imperative for teacher preparation programs, educational leadership policies, and curricular frameworks that explicitly address the competencies required to lead heterogeneous multigrade classes, manage behavioural diversity, and sustain productive learning environments where all learners can engage meaningfully despite differences in age, ability, and educational background.

Across Southeast Asia, multigrade (MG) teaching is widely documented as a structural response to geographic isolation, low enrolment, and teacher shortages, particularly in remote and rural communities. A SEAMEO INNOTECH synthesis of country reports quantified the scale of MG implementation across the region: Cambodia recorded 1,353 multigrade classes (1.6% of all classes) across 22 provinces, while Viet Nam reported 8,404 multigrade classes (3.1% of all classes) across 49 provinces. The same synthesis noted that in Indonesia, 66% of schools in remote areas are multigrade in nature due to lack of teachers, and that 3,899 schools in outlying/outer small islands and border areas were also identified as multigrade schools. These figures indicate that MG instruction is not an exceptional practice in ASEAN, but a mainstream delivery mechanism used to maintain access to basic education under constrained conditions.

Thailand provides a particularly clear illustration of the relationship between small-school prevalence and the necessity of MG arrangements. SEAMEO INNOTECH reported that 44% of Thailand's roughly 33,000 schools (13,915) were classified as small, and that in 2010, 3,600 multigrade schools fell under the Office of the Basic Education Commission (OBEC). More recent systems-level evidence aligns with this structural picture: a Thailand education resource assessment (linked to EEF and OECD-oriented analyses) reported that 57% of Thai schools are small (68% among primary schools) and emphasized that many small schools are chronically short of teachers, making it difficult to operate separate grade-level classes without using multigrade teaching or hiring temporary staff. Together, these sources frame MG teaching in Thailand as a persistent system feature driven by school size distribution and teacher allocation constraints, not simply a classroom-level preference.

ASEAN evidence also highlights how leadership and governance demand intensify in multigrade and small-school contexts. In Malaysia, a qualitative study on multigrade management reported that the Ministry of Education introduced a policy requiring government primary schools with enrolment of 30 and below to implement combined multigrade classrooms; this policy involved 393 schools, and feedback from 68 school heads identified major challenges related to teacher pedagogical skills, pupil ability, and resource limitations, alongside recommendations for sustained leadership support and multigrade-specific capacity building. This is especially relevant to studies examining “school head support,” because it documents (a) the scope of policy-driven multigrade implementation and (b) the operational pressures placed on school leaders tasked with supporting teachers in multigrade delivery.

Beyond leadership, ASEAN programs emphasize that improving MG teaching requires deliberate teacher development and practical classroom supports. Regional documentation on small schools and multigrade instruction describes interventions that combine training, monitoring, and clustering/peer-support strategies. For example, SEAMEO INNOTECH’s Project SMaLL report on Cambodia notes that the Ministry of Education trained 2,167 teachers serving 1,353 multigrade classes (2009–2010) and highlights regular monitoring and support to strengthen multigrade teaching practices. In Indonesia, education reform initiatives have also explicitly engaged multigrade challenges; DFAT/INOVASI program materials document national-level forums focused on “multi-grade teaching and learning” and describe teacher training efforts that translated into classroom practice improvements (e.g., use of structured reading materials and improved early-grade literacy pedagogy).

Overall, ASEAN literature and studies converge on a consistent conclusion: multigrade education functions as an equity mechanism for sustaining schooling in low-enrolment and hard-to-reach settings, but its effectiveness depends on (1) teacher preparation for multi-level instruction, (2) availability of multigrade-appropriate learning materials and routines, and (3) strong school head and system support—including staffing, supervision, and resource allocation aligned with small-school realities.

In the Philippines, MG schooling is institutionalized through DepEd DO 81, s. 2009 and DO 63, s. 2010, which formalized the Multigrade Program in Philippine Education (MPPE) and rolled out training/resource packages such as the MG-TRP and MG-TLP. According to the DepEd–SEAMEO INNOTECH–UNICEF national review, MG schools accounted for a significant share of elementary provision: in SY 2017–2018, Eastern Visayas hosted 19.41% of the country’s MG schools, while Caraga accounted for 6.11%.

Performance outcomes show parity between MG and monograde schools: NAT mean scores were statistically comparable nationwide, dispelling notions of MG as inherently inferior. Teacher training coverage also improved over time: the proportion of MG teachers trained rose from 1.36% in 2010 to 32.85% in 2017. However, gaps remain: only ~40% of school heads reported receiving training in MG instructional leadership, and compliance with facility standards varied. While ~82% of MG schools met the three-classroom standard, only ~30% followed the prescribed MG floor plan, and WASH compliance remained partial (DepEd, 2018). These findings confirm that when MG schools are adequately supported, student learning can equal that of monograde schools, but sustained supervision, head-teacher training, and infrastructure alignment remain pressing needs.

The MPPE (launched 1993) remains a key strategy to deliver equitable access; policy instruments have evolved to strengthen implementation and resourcing. DO No. 63, s. 2010 reinforced DO 81, s. 2009 by providing subsidies and clarifying use of funds for MG schools (e.g., school-based training, instructional materials).

At the same time, teacher welfare provisions recognize MG/hardship posts. DepEd–DBM Joint Circular No. 1, s. 2021 and DO 39, s. 2021 operationalize the Special Hardship Allowance via a Hardship Index—relevant to teacher morale and retention in remote MG sites.

A national MPPE review by DepEd–SEAMEO INNOTECH–UNICEF reported partial to adequate compliance across program components (classroom organization, capacity building, hiring), but persistent gaps in facilities, teacher incentives, MTB-MLE resources, and fund allocation. The report recommends flexible, context-responsive policies rather than one-size-fits-all approaches.

Region XIII (Caraga) is a notable MG stronghold, hosting 6.11% of all MG schools nationwide as of SY 2017–2018. This reflects the region’s geography, characterized by scattered islands and upland sitios where MG becomes the default mechanism for access. Despite resource gaps, national assessments indicate that MG schools in Caraga perform comparably to monograde schools in standardized tests such as the NAT. However, recurring regional bottlenecks—such as limited MG training opportunities for school heads, infrastructural non-compliance, and weak supervision—highlight areas where regional offices must intensify support (DepEd–SEAMEO INNOTECH–UNICEF, 2018).

At the provincial level, recent studies and division initiatives provide granular insights into MG realities. A 2024 study in San Miguel III District examined 12 MG Indigenous Peoples (IP) schools, involving 24 MG-IP teachers, 202 learners, and 24 parents. Teacher demographics showed that 79% were female and 67% had attended MG-IP training, with most handling three combined grade levels simultaneously. On a 5-point scale, intrinsic pedagogical challenges (e.g., lesson planning, assessment) averaged 4.42 (very serious), while extrinsic challenges (e.g., lack of electricity, internet, and materials) scored even higher at 4.87 (most serious). In contrast, practices of care and respect for learners scored 4.75 (to a great extent), indicating that despite systemic gaps, teachers maintained strong professional commitment. The study found significant correlations between teacher challenges and learner performance, as well as between responsive practices and parental support—demonstrating how both school and community engagement influence outcomes (IESRJ, 2024).

Division-level actions complement these findings. For instance, Division Memorandum No. 295, s. 2024 convened 103 participants (90 teachers and heads, 5 speakers, 8 PMT members) for Pedagogical Retooling on Differentiated Instruction under the MATATAG agenda, explicitly targeting MG teaching. Such initiatives show that Surigao del Sur is actively aligning teacher development and supervision with the persistent needs of MG schools in Indigenous and geographically isolated contexts.

Synthesis and Research Gap

Across international and Philippine literature, studies consistently document that teachers in multigrade (MG) classrooms encounter persistent challenges, including intensified lesson planning and assessment demands, the need to deliver differentiated instruction across multiple grade levels, and limited access to instructional resources—conditions that are particularly pronounced in rural and geographically isolated schools. Parallel leadership literature emphasizes the critical role of school heads in addressing these challenges through instructional supervision, resource mobilization, and context-responsive leadership practices tailored to multigrade settings.

Despite the existence of established policy frameworks and national programs supporting multigrade education, empirical evidence remains limited at the district level, particularly in relation to how teacher challenges and school head support jointly influence teaching effectiveness across multiple MG

schools. Most existing studies either focus exclusively on teacher difficulties or examine leadership practices in isolation, often within single-school or qualitative contexts. Consequently, there is a notable lack of quantitative, correlational studies that simultaneously examine these variables across multiple multigrade schools within the same district, where leadership conditions, resource availability, and instructional demands vary but remain under a shared administrative context. T

his gap is evident in Lingig I District, Division of Surigao del Sur, which comprises Eleven (11) multigrade schools operating under similar policy mandates yet facing differing levels of support and contextual constraints. Addressing this gap, the present study investigates teacher challenges and school head support as predictors of teaching effectiveness in multigrade classrooms using a descriptive-correlational design. By examining patterns across the district rather than a single school, the study aims to generate evidence-based insights that can inform targeted leadership interventions, instructional supervision, and district-level planning for multigrade education.

Theoretical Framework

Theoretical Framework The present study is anchored on several interrelated theories that provide lenses for understanding the dynamics of multigrade teaching, teacher challenges, and the role of school leadership in sustaining instructional quality.

Constructivist Learning Theory (Piaget, 1972; Vygotsky, 1978). Multigrade classrooms rely heavily on peer learning, collaborative activities, and scaffolding, which are consistent with constructivist principles. Piaget's theory of cognitive development highlights that learners actively construct knowledge through interaction with their environment. In multigrade settings, older students often serve as peer tutors, while younger learners benefit from observing and modeling advanced skills. Vygotsky's Zone of Proximal Development (ZPD) further explains how teacher scaffolding and peer support enable students to achieve tasks beyond their independent capacity—an instructional necessity in MG contexts.

Social Learning Theory (Bandura, 1977). Albert Bandura's social learning theory emphasizes modeling, imitation, and observational learning, which are naturally embedded in MG classrooms. Learners in different grades observe and emulate the behaviors, skills, and strategies of their peers and teachers. Teachers, however, face the challenge of deliberately structuring opportunities for such modeling, while school heads must ensure that classroom practices encourage positive peer interaction rather than competition.

Systems Theory of Education (von Bertalanffy, 1968; Hoy & Miskel, 2013). Education is viewed as an open system with interdependent components—inputs (teachers, learners, resources), processes (instruction, leadership, supervision), and outputs (learning outcomes). In MG settings, systemic issues such as resource allocation, teacher deployment, and supervisory structures directly influence classroom effectiveness. World Bank (2007) analyses confirm that logistical and organizational factors often explain MG struggles more than pedagogy itself. Thus, the school head's role as a systems manager—coordinating inputs and optimizing processes—is critical to sustaining learning outcomes.

Instructional Leadership Theory (Hallinger & Murphy, 1985). This theory underscores the pivotal role of school heads in shaping teaching and learning through three dimensions: (a) defining the school's mission, (b) managing the instructional program, and (c) promoting a positive school climate. Applied to MG contexts, instructional leadership entails supporting teachers in lesson planning, arranging professional

development, and mobilizing resources to compensate for systemic limitations. Research in Surigao del Sur shows that teacher challenges (e.g., planning burden, lack of resources) are significantly associated with learner outcomes, confirming the necessity of active school-head intervention.

Distributed Leadership Theory (Spillane, 2006). Given the complexity of MG teaching, leadership responsibilities are often shared among teachers, learners, and community stakeholders. Distributed leadership theory recognizes that leadership functions can be exercised by multiple actors within the school. In MG-IP schools, for example, teachers collaborate to adapt contextualized materials, while parents and community members provide supplementary support. The school head's role is to orchestrate these contributions into a coherent strategy that reduces teacher stress and sustains learner achievement.

Maslow's Hierarchy of Needs (1943) and Herzberg's Two-Factor Theory (1959). Teacher motivation and well-being are crucial to performance in MG schools. Maslow's framework explains that unmet basic needs (e.g., proper facilities, materials, manageable workloads) hinder higher-level professional fulfillment. Herzberg's model distinguishes between hygiene factors (infrastructure, pay, conditions) and motivators (recognition, professional growth). In Surigao del Sur, studies show that teachers rank extrinsic constraints (e.g., lack of electricity/internet at 4.87/5.0) as "most serious," reflecting unmet hygiene factors that undermine motivation and performance. School heads, therefore, must address both extrinsic and intrinsic factors to foster teacher resilience.

Statement of the Problem

This study aims to determine the levels and relationships among teacher challenges, school head support, and teaching effectiveness in multigrade classrooms of Lingig I District, Division of Surigao del Sur. Specifically, it seeks to answer the following questions:

1. What is the level of teacher challenges in multigrade classrooms in terms of:
 - 1.1 instructional planning and time management;
 - 1.2 classroom management and learner diversity;
 - 1.3 assessment and record-keeping; and
 - 1.4 availability of learning resources and facilities?
2. What is the level of school head support as perceived by multigrade teachers?
3. What is the level of teaching effectiveness of multigrade teachers in terms of:
 - 3.1 lesson delivery and differentiated instruction;
 - 3.2 classroom organization and learning environment;
 - 3.3 learner engagement and support; and
 - 3.4 assessment practices and feedback?
4. Is there a significant relationship between teacher challenges and teaching effectiveness in multigrade classrooms?

Hypotheses of the Study

The study is guided by the following null hypotheses:

H₀₁: There is no significant relationship between teacher challenges and teaching effectiveness in multigrade classrooms of Lingig 1 District.

H₀₂: There is no significant relationship between school head support and teaching effectiveness in multigrade classrooms of Lingig 1 District.



Figure 1. Schematic Diagram of the Study

METHODS

Research Design

This study employed a quantitative descriptive–correlational research design. A quantitative approach was adopted because the study sought to measure variables numerically, analyze patterns, and determine statistically significant relationships among teacher challenges, school head support, and teaching effectiveness in multigrade classrooms. Quantitative research is appropriate when the objective is to generate objective, measurable, and generalizable data through the use of structured research instruments and statistical procedures.

The descriptive component of the design focused on determining the levels of teacher challenges, school head support, and teaching effectiveness among teachers handling multigrade classes.

Descriptive research is concerned with describing existing conditions, characteristics, and perceptions of a population without manipulating variables. In this study, descriptive statistics such as frequency counts, percentages, means, and standard deviations were used to summarize and present the responses of participants drawn from the nine identified multigrade schools in Lingig I District, Division of Surigao del Sur.

The correlational component of the design examined the relationships between the independent variables and the dependent variable. Specifically, the study investigated whether teacher challenges and school head support are significantly related to teaching effectiveness in multigrade classrooms. A correlational design is appropriate when the research aims to determine the degree and direction of association between variables as they naturally occur, without manipulating conditions or assigning treatments.

This research design did not involve experimental manipulation or control of variables. Instead, it focused on identifying existing relationships among variables within real school settings. By including respondents from multiple multigrade schools within the district, the study enhanced the representativeness of the data and strengthened the reliability of the findings. However, due to the non-experimental nature of the design, the study does not establish cause-and-effect relationships but rather identifies statistically significant associations among variables.

Overall, the quantitative descriptive–correlational design is appropriate for this study because it aligns with the objectives of describing multigrade teaching conditions and examining the relationships among key variables across multiple multigrade schools within Lingig I District.

The findings are expected to provide empirical evidence that may inform school-based planning, instructional supervision, and district-level leadership and support strategies aimed at improving teaching effectiveness in multigrade classrooms.

Research Locale

This study was conducted in Region XIII, also known as the Caraga Administrative Region, which is situated in the northeastern portion of Mindanao, Philippines. The region is characterized by a combination of coastal areas, lowland plains, and mountainous terrains, with many communities located in geographically isolated and disadvantaged areas (GIDA). Because of these geographic and socio-economic conditions, several public elementary schools in the region operate under non-traditional instructional arrangements, including multigrade teaching, to ensure equitable access to basic education for learners in sparsely populated and remote communities.

Within Region XIII, the study is situated in the Province of Surigao del Sur, one of the provinces under the Department of Education–Caraga. Surigao del Sur is composed of both urban centers and rural municipalities, with a significant number of public elementary schools located in remote barangays. Due to low enrolment, limited teacher deployment, and infrastructural constraints, multigrade instruction is commonly implemented in selected schools across the province as a practical response to contextual challenges in delivering basic education.



Figure 2. Map of the Philippines and Lingig, Surigao del Sur

At the local level, the study focuses on Lingig I District, Division of Surigao del Sur. The district comprises Eleven (11) identified public elementary schools implementing multigrade instruction, many of which are situated in geographically isolated and disadvantaged areas. These schools combine two or more grade levels in a single classroom under the supervision of one teacher, in accordance with the Department of Education’s Multigrade Program in Philippine Education (MPPE). While this instructional arrangement enables continued access to education for learners in remote areas, it also places considerable instructional, managerial, and administrative demands on teachers and school heads.

The shared geographic and institutional conditions across the multigrade schools in Lingig I District—such as limited instructional resources, challenges in curriculum alignment, learner diversity, and constraints in supervision and support—make the district an appropriate and relevant setting for examining teacher challenges and school head support as predictors of teaching effectiveness in multigrade classrooms.

The Respondents of the Study

The respondents of this study were selected to ensure that the data gathered would be relevant, accurate, and reflective of the actual conditions of multigrade instruction in Lingig I District, Division of Surigao del Sur. Since the study aims to examine the relationship between teacher challenges, school head support, and teaching effectiveness in multigrade classrooms, the respondents were drawn from individuals who are directly involved in the planning, implementation, supervision, and delivery of multigrade instruction.

Table 1. Respondents of the study.

Respondent MT Schools	Population	Sample
Antonio A. Orozco Elementary School	3	3
Bentigan Primary School	1	1
Hamindang Primary School	3	3
Haguitiman Primary School	3	3
Obon Elementary School	2	2
Mahayahay Elementary School	3	3
Mansailao Elementary School	3	3
Maugob Primary School	3	3
Sta. Maria Elementary School	2	2
Tigbawan Primary School	2	2
Zion Elementary School	3	3
TOTAL	28	28

The respondents consisted of all public elementary school teachers handling multigrade classes and all school heads assigned to multigrade schools in Lingig I District. This includes school heads who, in addition to their administrative responsibilities, also carry teaching loads in multigrade classrooms. Both groups were considered appropriate respondents because they possess direct and practical experience with the instructional, managerial, and supervisory demands of multigrade education.

A total enumeration sampling technique was employed in the study. All teachers and school heads involved in multigrade instruction during the school year [insert SY, e.g., 2025–2026] across the nine identified multigrade schools in Lingig I District were included as respondents. This approach was deemed appropriate due to the relatively limited number of multigrade teachers and school heads in the district and ensured that the study captured the perspectives of the entire target population rather than a selected sample. The use of total enumeration minimized sampling bias and enhanced the representativeness and reliability of the data.

Teachers who were assigned exclusively to monograde classes and school personnel who were not directly involved in multigrade instruction were excluded from the study, as their teaching contexts and responsibilities differed from the focus of the research. The selection of respondents was therefore aligned with the objectives of the study and the nature of the variables being investigated.

Research Instrument

The primary instrument used in this study was a structured survey questionnaire developed by the researcher based on related literature, existing studies on multigrade teaching, instructional leadership, and teaching effectiveness, as well as the objectives of the study. The questionnaire was designed to gather quantitative data on teacher challenges, school head support, and teaching effectiveness in multigrade classrooms.

Part I: Respondent Profile

This section gathered background information about the respondents, including age, sex, years of teaching experience, years handling multigrade classes, grade level combinations handled, class size, and trainings attended related to multigrade teaching. These data were used to describe the respondents and contextualize the findings of the study.

Part II: Teacher Challenges Scale This section measured the level of teacher challenges encountered in multigrade classrooms. It consisted of items categorized into four dimensions:

1. instructional planning and time management,

The instrument was composed of four (4) parts, using a five-point Likert scale to quantify respondents' perceptions. The scale was interpreted as follows:

Range of Means	Description	Interpretation
4.20 – 5.00	Strongly Agree	The impact of multigrade teaching as perceived by the teachers is very good.
3.40 – 4.19	Agree	The impact of multigrade teaching as perceived by the teachers is good.
2.60 – 3.39	Neutral	The impact of multigrade teaching as perceived by the teachers is fair.
1.80 – 2.59	Disagree	The impact of multigrade teaching as perceived by the teachers is poor.
1.00 – 1.79	Strongly Disagree	The impact of multigrade teaching as perceived by the teachers is very poor.

2. instructional planning and time management,
3. classroom management and learner diversity,
4. assessment and record-keeping, and
5. learning resources and facilities.

Respondents rated each statement based on the degree to which it reflected their experiences in multigrade teaching. Higher mean scores indicated a higher level of perceived challenges.

Part III: School Head Support Scale

This section assessed the level of school head support as perceived by multigrade teachers. The items focused on four areas of support:

1. instructional supervision and coaching,
2. professional development support,
3. resource mobilization and logistical assistance, and
4. psychosocial and motivational support.

Responses reflected the extent to which teachers perceived the presence and effectiveness of school head support mechanisms.

Part IV: Teaching Effectiveness Scale

This section measured the level of teaching effectiveness of multigrade teachers. It included statements related to lesson delivery and differentiated instruction, classroom organization and learning environment, learner engagement and support, and assessment practices and feedback. Higher scores indicated a higher level of perceived teaching effectiveness.

To ensure content validity, the questionnaire was submitted to three to five experts in educational research and school administration, including a research adviser, a master teacher, and a school head.

Their comments and suggestions were incorporated to improve clarity, relevance, and alignment with the objectives of the study.

The reliability of the instrument was established through pilot testing and the computation of Cronbach's alpha coefficient. An alpha value of 0.70 or higher was considered acceptable, indicating that the instrument was reliable for use in the study.

If pilot testing was not feasible due to a limited number of respondents, internal consistency was assessed during the main data analysis.

Data Gathering Procedures

The data collection process for this study was carried out systematically to ensure accuracy, ethical compliance, and reliability of the data gathered. The following steps were undertaken:

First, Securing Approval and Permission Prior to data collection, the researcher sought formal approval from the Schools Division Superintendent (SDS) of the Division of Surigao del Sur through proper channels. Upon approval, permission was also obtained from the School Heads of Lingig 1 District to conduct the study among teachers handling multigrade classrooms. Ethical considerations and research protocols mandated by DepEd Order No. 13, s. 2021 (Research Management Guidelines) were strictly observed.

Next, Orientation of Respondents After securing permission, the researcher coordinated with the school head to schedule the administration of the questionnaires. The respondents were oriented regarding the purpose of the study, the nature of their participation, and the confidentiality of their responses. They were informed that participation was voluntary and that they could withdraw at any time without any academic or professional consequences.

Then third is the Administration of Research Instruments The validated survey questionnaires were personally distributed to all identified multigrade teachers using a total enumeration approach. The questionnaires consisted of four parts: respondent profile, teacher challenges, school head support, and

teaching effectiveness. Clear instructions were provided to ensure proper understanding of the items and response scales.

During the Retrieval of Questionnaires Respondents were given sufficient time to complete the questionnaires. Upon completion, the researcher immediately retrieved the questionnaires to ensure a high retrieval rate and to prevent loss or incomplete responses. Each questionnaire was checked for completeness before inclusion in the data set.

lastly, the collected data were organized, coded, and encoded into a spreadsheet or statistical software for analysis. Responses were assigned numerical values based on the Likert scale used in the instrument. The data were then reviewed to ensure accuracy and consistency prior to statistical treatment.

6. Ethical Safeguards and Data Security Throughout the data collection process, confidentiality and anonymity were strictly maintained. Respondents' identities were not recorded, and all data were used solely for academic purposes. Completed questionnaires and electronic files were securely stored and accessed only by the researcher.

Statistical Treatment of Data

To answer the specific problems of the study, the following statistical tools were used. Data were analyzed using appropriate descriptive and inferential

statistics at a 0.05 level of significance.

SOP 1 What is the level of teacher challenges in multigrade classrooms in terms of instructional planning and time management, classroom management and learner diversity, assessment and record-keeping, and availability of learning resources and facilities?

- Statistical Tools Used:
 - Frequency and Percentage
 - Weighted Mean
 - Standard Deviation

Purpose: To describe the level of teacher challenges across the identified dimensions.

SOP 2 What is the level of school head support as perceived by multigrade teachers in terms of instructional supervision and coaching, professional development support, resource mobilization and logistical support, and psychosocial and motivational support?

- Statistical Tools Used:
 - Frequency and Percentage
 - Weighted Mean
 - Standard Deviation

Purpose: To determine the level of school head support as perceived by the respondents.

SOP 3 What is the level of teaching effectiveness of multigrade teachers in terms of lesson delivery and differentiated instruction, classroom organization and learning environment, learner engagement and support, and assessment practices and feedback?

Statistical Tools Used:

- Frequency and Percentage
- Weighted Mean
- Standard Deviation

Purpose: To describe the level of teaching effectiveness of multigrade teachers.

SOP 4 Is there a significant relationship between teacher challenges and teaching effectiveness in multigrade classrooms?

Statistical Tool Used:

- Pearson Product–Moment Correlation Coefficient (Pearson r)

Purpose: To determine the degree and direction of the relationship between teacher challenges and teaching effectiveness.

Range of Means	Description	Interpretation
4.20 – 5.00	Very High	The impact of multigrade teaching as perceived by the teachers is very good.
3.40 – 4.19	High	The impact of multigrade teaching as perceived by the teachers is good.
2.60 – 3.39	Moderate	The impact of multigrade teaching as perceived by the teachers is fair.
1.80 – 2.59	Low	The impact of multigrade teaching as perceived by the teachers is poor.
1.00 – 1.79	Very Low	The impact of multigrade teaching as perceived by the teachers is very poor.

SOP 5 Is there a significant relationship between school head support and teaching effectiveness in multigrade classrooms?

Statistical Tool Used:

- Pearson Product–Moment Correlation Coefficient (Pearson r)

Purpose: To determine the degree and direction of the relationship between school head support and teaching effectiveness.

Decision Rule

If $p \leq 0.05$, the null hypothesis is rejected.

If $p > 0.05$, the null hypothesis is not rejected.

Interpretation of Weighted Mean

RESULTS AND DISCUSSIONS

SOP 1. what is the level of teacher challenges encountered by Multigrade Teachers?

Table 2 shows that multigrade teachers experience a Very High level of challenges across instructional, managerial, assessment, and resource-related dimensions. The predominance of Strongly Agree responses indicates that teachers find instructional planning and time management particularly demanding, as they are required to prepare and implement multiple curricula simultaneously within limited instructional time. This finding is consistent with the work of Little (2019) and Mulryan-Kyne (2020), who emphasized that multigrade instruction significantly increases teachers' cognitive and instructional workload.

The Very High level of difficulty in classroom management and learner diversity reflects the complexity of addressing varied developmental stages, learning abilities, and behavioral needs in one learning environment, a challenge also documented by Benveniste and McEwan (2018).

Similarly, assessment and record-keeping demands—such as preparing separate assessment tools and providing timely feedback—intensify teachers' responsibilities, corroborating findings by Aksoy (2022) that multigrade teachers often face assessment overload.

The scarcity of learning resources and inadequate facilities further compound these challenges, reinforcing UNESCO's (2021) assertion that structural limitations significantly affect instructional delivery in multigrade contexts.

Table 2. Level of Teacher challenges in Multigrade Classrooms

Dimension	Overall Description	Verbal Interpretation
Instructional Planning and Time Management	Majority Strongly Agree	Very High
Classroom Management and Learner Diversity	Majority Strongly Agree	Very High
Assessment and Record Keeping	Majority Strongly Agree	Very High
Availability of Learning Resources and Facilities	Majority Strongly Agree	Very High

SOP 2. what is the level of school head support as perceived by Multigrade Teachers?

Table 3 indicates that multigrade teachers perceive school head support to be at a Very High level across all leadership dimensions. Teachers strongly affirmed that school heads provide effective instructional supervision through classroom observations, constructive feedback, and coaching—practices that align with Glickman, Gordon, and Ross-Gordon's (2018) view of instructional supervision as a developmental and collaborative process.

The Very High ratings for professional development support suggest that school heads actively foster teachers' continuous learning through trainings and school-based learning activities, consistent with Hallinger's (2020) instructional leadership framework.

Resource mobilization and logistical support were likewise rated Very High, indicating that school heads play an essential role in securing materials and addressing operational concerns, a leadership function emphasized by Leithwood et al. (2020).

Moreover, strong psychosocial and motivational support reflects transformational leadership practices that enhance teacher morale and resilience, as supported by research from Day and Sammons (2019), which highlights the importance of relational leadership in sustaining teacher effectiveness under challenging conditions.

Table 3. Level of School Head Support as Perceived by Multigrade Teachers

Dimension	Overall Description	Verbal Interpretation
Instructional Supervision and Coaching	Majority Strongly Agree	Very High
Professional Development Support	Majority Strongly Agree	Very High
Resource Mobilization and Logistical Support	Majority Strongly Agree	Very High
Psychosocial and Motivational Support	Majority Strongly Agree	Very High

SOP 3. what is the level of teaching effectiveness of Multigrade teachers?

Table 4 reveals that multigrade teachers demonstrate a Very High level of teaching effectiveness despite the substantial challenges identified earlier. Teachers strongly agreed that they deliver lessons clearly, apply differentiated instructional strategies, and adjust instruction according to learners' needs, supporting Tomlinson's (2019) assertion that effective differentiation is central to inclusive and multilevel teaching.

The Very High ratings in classroom organization and learning environment indicate teachers' ability to establish structured routines that facilitate independent and cooperative learning, a practice emphasized by Veenman (2020) in successful multigrade classrooms.

Learner engagement and support also emerged at a Very High level, suggesting that teachers effectively motivate learners and promote peer learning, consistent with social constructivist perspectives (Bruner, 2018).

Furthermore, strong assessment practices and feedback reflect teachers' capacity to use formative assessment to guide instruction, aligning with Black and Wiliam's (2018) findings on assessment for learning. These results affirm that multigrade teachers possess strong professional competence, adaptability, and instructional skill.

Table 4. Level of School Head Support as Perceived by Multigrade Teachers

Dimension	Overall Description	Verbal Interpretation
Instructional Supervision and Coaching	Majority Strongly Agree	Very High
Professional Development Support	Majority Strongly Agree	Very High

Resource Mobilization and Logistical Support	Majority Strongly Agree	Very High
Psychosocial and Motivational Support	Majority Strongly Agree	Very High

Taken together, the findings across Tables 2, 3, and 4 demonstrate that while multigrade teachers experience a Very High level of instructional and contextual challenges, they also receive Very High school head support, which coincides with a Very High level of teaching effectiveness. This pattern supports existing literature asserting that strong instructional leadership and supportive school environments significantly buffer the negative effects of challenging teaching conditions (Leithwood et al., 2020; Hallinger, 2020).

The results suggest that effective school head support plays a critical role in sustaining teacher performance and instructional quality in multigrade classrooms, thereby reinforcing the predictive relationship examined in the study.

Summary

This study examined the predictive influence of teacher challenges and school head support on the teaching effectiveness of multigrade teachers in Lingig I District, Division of Surigao del Sur, using a descriptive–correlational research design. Data were gathered through a structured questionnaire and analyzed using descriptive statistical measures.

Findings revealed that the level of teacher challenges in multigrade classrooms was Very High across instructional planning and time management, classroom management and learner diversity, assessment and record-keeping, and availability of learning resources and facilities. These results indicate that multigrade teachers face complex instructional, managerial, and logistical demands inherent in handling multiple grade levels within a single classroom, consistent with earlier studies emphasizing the demanding nature of multigrade instruction (Little, 2019; Mulryan-Kyne, 2020).

Despite these challenges, the level of school head support was also rated Very High in terms of instructional supervision and coaching, professional development support, resource mobilization and logistical assistance, and psychosocial and motivational support. This suggests that school heads play an active and supportive role in guiding, motivating, and assisting multigrade teachers, aligning with instructional and transformational leadership literature (Glickman et al., 2018; Hallinger, 2020).

Moreover, the teaching effectiveness of multigrade teachers was found to be Very High across lesson delivery and differentiated instruction, classroom organization and learning environment, learner engagement and support, and assessment practices and feedback. These findings indicate that despite the demanding conditions of multigrade teaching, teachers demonstrate strong professional competence, adaptability, and resilience. This supports existing research asserting that effective teaching can be sustained even in challenging contexts when appropriate leadership and support systems are present (Tomlinson, 2019; Veenman, 2020).

Conclusions

1. Multigrade teaching is characterized by substantial instructional and contextual challenges. The Very High level of challenges experienced by teachers confirms that multigrade classrooms require complex planning, effective classroom management, extensive assessment practices, and adequate resources. These challenges are structural and pedagogical in nature and are not merely a result of individual teacher limitations, supporting the assertions of UNESCO (2021) regarding the inherent demands of multigrade education.

2. Strong school head support is a critical factor in sustaining teachers' instructional capacity. The Very High level of perceived school head support demonstrates that effective instructional leadership, professional development facilitation, resource mobilization, and psychosocial encouragement significantly contribute to teachers' ability to cope with multigrade demands. This conclusion aligns with leadership theories emphasizing the central role of school heads in improving teaching conditions and outcomes (Leithwood et al., 2020; Day & Sammons, 2019).

3. High teaching effectiveness can be achieved despite challenging teaching conditions. The Very High level of teaching effectiveness among multigrade teachers indicates that teachers are capable of delivering quality instruction, engaging learners, and implementing sound assessment practices even under demanding circumstances. This supports constructivist and differentiated instruction theories, which posit that effective teaching is rooted in adaptability, reflective practice, and responsive instruction (Bruner, 2018; Tomlinson, 2019).

4. School head support serves as a buffering mechanism against the negative effects of teacher challenges. The convergence of Very High teacher challenges, Very High school head support, and Very High teaching effectiveness suggests that strong leadership mitigates the adverse effects of challenging instructional contexts. This reinforces the predictive framework of the study and supports empirical findings that leadership quality directly influences teacher performance and instructional effectiveness (Hallinger, 2020; Leithwood et al., 2020).

Recommendations

1. For School Heads School heads are encouraged to sustain and further strengthen instructional supervision practices, particularly through regular classroom observations, constructive feedback, and coaching focused on multigrade strategies. Continued emphasis on psychosocial support and recognition of teachers' efforts is also recommended to maintain teacher motivation and resilience, as supported by Day and Sammons (2019).

2. For the Department of Education (DepEd) DepEd may consider developing targeted policies and support programs specifically for multigrade teachers, including specialized training, contextualized instructional materials, and workload-sensitive assessment guidelines. Providing adequate resources and improving school facilities in multigrade settings can help address systemic challenges identified in the study (UNESCO, 2021).

3. For Multigrade Teachers Teachers are encouraged to continue engaging in professional development activities, collaborative learning communities, and reflective teaching practices to further enhance instructional effectiveness. Strengthening peer collaboration and sharing best practices in multigrade instruction may also contribute to improved teaching and learning outcomes (Veenman, 2020).

4. For Future Researchers Future studies may explore similar variables using mixed-methods or qualitative approaches to gain deeper insights into teachers' lived experiences in multigrade classrooms. Researchers may also examine additional factors such as teacher self-efficacy, learner achievement, or community involvement to further enrich the understanding of multigrade education.

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