Abstract—Multigrade Teaching, which is the method of teaching as one class students belonging to different age groups or grade levels, is not a new educational innovation nor a recent method presented by education specialists and has in fact been historically practiced far longer than Monograde Teaching. However, in the Philippines, Monograde Teaching is the predominant practice for formal school education and Multigrade Teaching is often perceived as a backwards, ineffective strategy and has been relegated as the instruction method of choice due to economic necessity in remote, far flung, and geographically-challenged areas. This ethnographic research aims to study how Multigrade Team Teaching was successfully used in an urban location by a small progressive inclusive private school, where at least 50% of the enrollees are medically diagnosed as children with special needs, and to examine and explore the practices and experiences of the educators and young learners involved. This study particularly seeks to answer the following questions regarding practicing Multigrade Teaching in a school for children with and without needs: 1.) What effective strategies do the teachers employ? 2.) What factors facilitate the transfer of knowledge from teacher to student and from student to fellow student? 3.) How are lessons planned? 4.) How do teachers deal with behaviors that disrupt learning? and 5.) How are assessments conducted?

Keywords—Multigrade Teaching; Multigrade Class; Multigrade School; team teaching; collaborative teaching; learning with peers; learning from peers; inclusive school; inclusive program; children with needs

I. INTRODUCTION

Learning includes all activities that stimulate students’ physical, mental, spiritual and personality development. It should be the primary objective of each school to admit all children and provide quality education and must develop each of their potentials.

Copyright © 2019, the Authors. Published by Atlantis Press SARL.
This is an open access article under the CC BY-NC 4.0 license (http://creativecommons.org/licenses/by-nc/4.0/).
II. BACKGROUND

A. Global History of Multigrade Schooling System

Multigrade schooling system is practiced in different parts of the world. At the beginning of the 21st Century learning, teaching and curricula in all systems of formal education are based on age-specific groups of learners following curriculum grades sequentially. It has not always been so. As explained by Hamilton (1989:37) how, in medieval schools in Europe, teachers taught students at 'all levels of competence and, accordingly, organized their teaching largely on an individual basis'. Many teaching and learning arrangements, however, deviate from this ideal. Many teaching groups, and particularly those in systems that have yet to achieve Education for All (EFA), are best described as multigrade rather than monograde[3].

B. Cases Of Multigrade Teaching In Industrialized Countries

The introduction of multigrade or ‘vertically grouped’ classes in many English primary schools in urban and rural areas in the 1960s and 1970s was part of a broader reform of the philosophy and pedagogy of primary education. In Sweden too, there was a revival of interest in multigrade teaching in the 1970s in urban as well as rural areas. A 1976 government bill encouraged “age integration” for the benefit of student development. Laukkonen and Selventoinen (1978) describe how, in Finland, where multigrade schools are common, innovations in teaching and curriculum strategies developed in multigrade schools are seen as fertile ground for the development of ideas in monograde schools. In Victoria, one of Australia’s most populous states, policymakers decided that schools would employ multigrade teaching during the first three years of primary schooling, in the belief that ‘multigrade teaching was . . . the best form of education for children’ (Birch and Lally, 1995:13). In England, although many urban schools adopted ‘vertical grouping’ as part of a broader reform of primary education, by the 1980s multigrade teaching was increasingly being adopted by schools through force of circumstance and falling rolls rather than choice.

C. Philippine Context: History of Multigrade in the Philippines Up to the Present

Improving Access to Elementary Education by Providing Complete Grade Levels in All Public Elementary Schools Through Combination and/or Multigrade Classes and DECS Orders No. 96 s. 1997 policies and guidelines in the organization and operation of MG classes.

Furthermore, the information presented is the result of the survey reported by 205 multigrade school respondents representing 2.5% of the total number of multigrade school in the country. Although Dep Ed in the 1990 issued policies on the multigrade program the survey revealed that there are multigrade schools that are just a decade short from their centennial year. There are also 1.5% of the schools surveyed that are around 70 years old.

Majority or about 18% of the respondent claimed that their multigrade schools have been operational for more than 10-20 years. Their also a bigger proportion of school respondents who reported that their school have been recently operating as multigrade such as those that are less than ten years old comprising 11.2% the current proliferation of multigrade school could be attributed to Dep Ed’s “Education For All” campaign, which sought to reach the unreached learners and ensure their right to education.

Based on data from DepEd, 31.7% or 12,278 of the 38,683 public elementary schools have multigrade classes (school year 2013-2014). Eastern Visayas Region has the highest concentration of multigrade schools, totaling 58.3% of total public elementary schools (Figure 1). Central Luzon, a region with highly urbanized areas, has the lowest (12.4%). Of the 15 million public elementary students in 2013, 9.5% or 1.4 million were enrolled in multigrade schools.

D. Local Level: Mindhaven School Inc. (MSI) In Roxas City

MindHaven School Inc. is a small, not-for-profit, inclusive private school offering Pre-School and Grade School education services. The school “Whole Child, Whole School, Whole Community” Inclusive Program is a brain-based, research-based, evidence-based, practice-based, activity-based, play-based inclusive curriculum which incorporates and integrates principles from the latest in education research such as, among others, Multiple Intelligences Theory, Whole-Brain Learning, Learning Styles, Socio-Emotional Learning, Multi-Grade Program, Education for Sustainable Development, and Environment- Based and Culture-Based Education, eventually resulting in a developmentally-appropriate holistic program tailored to each child’s uniqueness while cultivating him/her intellectually, emotionally, spiritually, physically, and socially.

Lessons, activities, and programs are designed for children to use their creativity while developing their imagination, dexterity, tenacity, compassion, critical thinking, problem-solving skills, and physical, cognitive, and emotional strengths. The school has an average of 100-130 students in the Toddler to Grade School level, with 50% of the population identified as children with special needs.

E. MSI Non-Rural Multigrade Context

1) Response to Intervention Model (RTI)

MindHaven School has long adapted the Response to Intervention model (RTI) - to children with or without needs in school. Thus the “Tiering” is a critical element in teacher’s strategy for the proper placement of the child. The Tier 1 for kids with advance skills, Tier 2 for kids with at par level, and Tier 3 for diagnosed Students with Learning Needs and students without diagnosis as learners that need accommodations and modifications. Knowing the Tiering in advance would help the teacher prepare the lesson plans from the Presentation of Content, the Process and the Product expected from each tier up to the Differentiated assessment of the lesson.

2) MSI’s Four Perspectives in Transfer of Learning

In the transfer of learning in a MSI multi-grade school setting four perspectives are essentials in the design of environment where learning would be taking place: a) Learner-centered, b) knowledge-centered, and c) community-centered, D) Assessment centered[4].
Learner-centered - The effectiveness of learning strategies is influenced by such contextual factors as the learner’s existing skills and prior knowledge, the nature of the material, and the goals for learning. The teaching strategies are formulated based on this background knowledge of each child observing the adaptive RTI process for academic input, the Restorative justice practice in school for Socio emotional learning and Behavior modification program for those with medical diagnosis.

Knowledge centered - The thirst for knowledge starts with the curiosity to explore the surroundings which is the start of their learning so when they perceive the school or learning environment as a place where they “belong” and when the environment promotes their sense of agency and purpose then the students develop interconnected pathways within a discipline so they can better understand & learn the relevance of the lessons in school to their everyday realities.

Community-centered involves understanding the developmental, cultural, contextual, and historical diversity of learners in formulating a Neurodevelopmental profile which is central to understanding how students learn. The relationship between brain development and learning is reciprocal, as development of the brain influences behavior and learning, and in turn, learning influences brain development and brain health. As the uniqueness of each brain is established scientifically, then it becomes the theoretical foundation for the school’s philosophy to establish the culture of respect for diversity and strengthen the climate of acceptance.

Assessment centered environment in multi-grade school setting which is a total product of the formative and summative assessment is a continuous process which is also done individually, with peer, with a teacher or as a group either formally or informally provide opportunities for them to improve their metacognitive skills also their socio emotional competencies.

3) Learning Environments

MindHaven School’s brain-based, play-based, and environment-based education program necessitates learning spaces that allow children to learn and apply their lessons in a natural setting while engaging all their senses. Learners with and without need can explore a range of sensory-rich spaces that are tailor-made to their needs. MindHaven School’s learning spaces for both students with and without special needs may be roughly categorized into the following:[5]

a) School-Based Learning Spaces
   - Regular Class Areas
   - SPED Room
   - Natural Learning Spaces, referring to the immediate surroundings/outdoors of the school, are as much a learning environment as classrooms.

b) Home-Based Learning Spaces

Home-Based Learning Spaces are very critical venues for learning and Behavior modification program for those with medical diagnosis. The community as a learning space of the school refers to the barangay where the school building is located, the city/municipality, the province, the region, and the nation.

III. RESEARCH PURPOSE

Since no research was conducted about the use of multi grade as a strategy in inclusive education, an ethnographic study was done. It aims to study how Multigrade Schooling System was successfully used in an urban location by a small progressive inclusive private school, where at least 50% of the enrollees are medically diagnosed as children with special needs, and to develop cognitive & non-cognitive competencies of children with needs; This study particularly seeks to answer the following questions regarding practicing Multigrade schooling system in a school for children with and without needs: 1.) What effective strategies do the teachers employ? 2.) What factors facilitate the transfer of knowledge from teacher to student and from student to fellow student? 3.) How are lessons planned? 4.) How do teachers deal with behaviors that disrupt learning? and 5.) How are assessments conducted?

IV. METHODOLOGY

A. Research Method and Data Collection Procedure and Analysis

This ethnographic study research was set forth to examine and explore the practices and experiences of MSI educators who were participating in inclusive multi grade schooling classrooms and how this approach influenced the stand of the school that follows the principles of age-appropriate Progressive Inclusive education program[6]. The data of this qualitative research was collected through in-depth and semi-structured interviews with study participants, on-site observations, focus group discussions, IEP meetings, journal and portfolio explorations, and document and archival explorations. All these methods were used to craft communal and substantive accounts grounded on the stories of those who were deeply involved in the school’s inclusive education program. The researchers analyzed the data using Creswell’s analysis in an ethnographic study and were engaged in the process of moving in analytic circles that go spirally upward, a process that allows one to produce a continually more detailed analysis.[7]

B. Setting

This study took place in an inclusive school, MindHaven School in Roxas City, Philippines that has included children with special needs since 1997. The school has been continuously permitted to function and since 1993 and nationally recognized in 2003. For school year 2019-2020, the school provides services to 137 children ages 1.5 years old through 6th grade. There are 21 teachers who adhere to play-based curriculum with lessons, activities and programs designed for children to use their creativity.
C. Partakers

The partakers of the study include ten inclusive teachers from Toddler Level to Sixth Grade Level. Data were analyzed and triangulated within multiple sources to ensure substantiation thus identifying discrepancies and commonalities, specifically using in-depth, semi-structured interviews, and focus group discussions on multi-age classroom and outdoor class activities observations, documents and archival exploration, portfolios and videotape analyses.

They were purposively chosen for the study for the reason that they are particularly useful in the context of the study and are the major stakeholders who are involved in designing, giving, receiving, or administering the program being deliberated[8].

V. FINDINGS AND DISCUSSIONS

The study generated four aspects of deviation from monograde system that influences the teaching and learning processes of students with and without needs.

A. Accepting and Flexible Environment

The “Bata Mo, Bata Ko” Socio-Emotional Learning Program (SELP) of MindHaven School created and institutionalized the culture and climate of acceptance. “Bata Mo, Bata Ko” is a Filipino saying which translates to “Your child is my child; my child is your child.”, harkening to the adage that it takes a community to raise a child. This SELP provided a quality sequential and developmentally appropriate curriculum that develops self-awareness, self-management, social awareness, relationship skills, and responsible decision-making and which addresses inclusivity (especially of children with disabilities and from poor families) and sustainability with significant collaboration of the school, families, and community. Family individualism was transformed into a “Bayanihan” spirit (a traditional system of mutual assistance in which the members of a community work together to accomplish a difficult task) and acted as a catalyst of collaboration between families to accomplish home-school-community tasks. Teacher A attested that:

“At first, I thought Teaching a diverse class will be very challenging. But MindHaven School’s SELP paved the way for a better communication between me, my students and their families. The program has a proactive strategy in resolving conflicts, thus, rendering a class with kind and peace-loving kids. In effect, I became a responsive teacher to both my students with and without needs.”

Caring, supportive, and emotionally available teachers have students who feel a sense of belonging and become emotionally attached and engaged in the learning process[9].

MindHaven School’s learning spaces are engaging, promote movement, and are responsive to the diverse backgrounds and experiences of the students. This allow a connection between initial place of learning (home or community) to the school. This is referred to as Progressive formalization which begins with the informal ideas that students bring to school and gradually helps them to see how these ideas can be transformed and formalized[6]. Teacher B reported:

“Mico is my 2nd grader student diagnosed with ADHD. Mico’s grandmother shared to me that Mico is mostly interested to used the hammer at home on all objects. Inorder to make use of this interest, we offered a carpentry class to him and eventually the kid understood that hammering is only a carpentry task and for carpentry purposes. Now , Mico is on his third year of carpentry classes, applying integrated lessons on math, science and art.”

B. Differentiated Instruction as Teaching Strategy

In Multi-grade school setting, the transfer of knowledge is facilitated based on our differentiated, personalized and individualized teaching strategies: Anchoring activities, Learning centers, Independent study projects, Small Group Project, and Converge – Diverge - MSI strategy which allows for a common input with leveled outputs. The whole class begins with a concept being taught by the teacher in a direct teaching method. (Flexible grouping) This old strategy from multigrade system is applied innovatively to students with and without needs.

Differentiating instruction may mean teaching the same material to all students using a variety of instructional strategies, or it may require the teacher to deliver lessons at varying levels of difficulty based on the ability of each student[10].

C. Age- and Developmentally-Appropriate Assessments With Accommodation for Diverse Learners

This is apparent in Passive to active approach of transferring knowledge and assessing progress. This is an approach where transfer is viewed not as a static but a dynamic process that requires students to actively choose their learning style – as audio, visual or kinesthetic learners to choosing their interest -based activities, their materials to how they would choose to show their understanding through an output be it arts work, a performance or written work and also how they would receive feedback. Teacher Z, a 5th Grade science inclusive teacher states that,

“In my science class, children with intellectual disability, take assessment either by the use of charts or the assessment questions translated to them in their mother tongue. Oftentimes, these students can answer almost all questions and sometimes get a perfect score. It’s not favoritism. It’s just fair to give them all assessment but it’s not equal to give the same assessment to everyone when you are fully aware of their learning gaps.”

Understanding the implications of learning disabilities, preparing to teach students with diverse characteristics, and learning to accommodate students with learning disabilities are essential for faculty and staff to provide academic and career opportunities for these students that are equivalent to those provided to their nondisabled peers. The goal is to give the student with a disability equal access to the learning environment. Individualized accommodations are not designed
to give the student an advantage over other students, to alter a fundamental aspect of the course, nor to weaken academic rigor.

D. Restorative Justice Practices to Manage Disruptive Behavior

Teachers deal with disruptive behavior through the following:

1) Before disruptive behavior occurs

Prior knowledge of the students’ developmental profile and socio-cultural background which data was collected upon entry assessment focusing on the entire child showing his strengths and weaknesses; cognition and learning potential, social and communication skills, speech and language development and functional skills.

2) When disruptive behavior occurs

For students with diagnosis, behavior modification is based on his brain-based condition and identified target behavior upon which a Functional Behavior plan is formulated to be implemented, assessed & evaluated as a team by teachers involved on scheduled frequency or as needed.

Depending upon the identified disruptive behavior the following are observed in the classroom or in any learning areas:

- Observance of Restorative Justice practice in school
- Prevention of self-harm or harming others for children having meltdown or tantrums
- Resolution stage is always observed through one-on-one processing or class-circle depending on the issues that were resolved
- Home-School report is done if & when necessary for parents’ involvement in the issue & practice of Restorative Practice at home.

VI. CONCLUSION AND RECOMMENDATIONS

MindHaven’s school’s implementation of Multi-grade school setting in an Urban area is an innovative, progressive school program which is not just a strategy for classroom teaching but is rooted in the advocacy for Child’s Rights-Based education & neurocognitive research which shows that developmental processes involve interactions between children’s competencies & their environmental & interpersonal supports.

In the transfer of learning in a multi–grade school setting-four perspectives are essentials in the design of environment where learning would be taking place: a) Learner-centered, b) Knowledge-centered, c) Community-centered, and d) Assessment-centered. This kind of culture and climate promotes the perspective that learning is not an individual responsibility and activity but a community responsibility to collectively and collaboratively contribute to the cognitive and non-cognitive development of each member of the class. The alignment of these factors & perspective many time overlap & mutually influence each other as each is an important element in designing a learning environment. Once these are in place the details of day to day cycle of the process of planning to evaluation is integrated to become a comprehensive Progressive Inclusive MindHaven School program.

MindHaven school’s multi grade school setting in urban area is an innovative approach deviating from the general accepted practices that multigrade teaching is only confined in rural areas.

MindHaven school’s multi grade approach has proven that the “labeling” or stigma of multi grade strategy being done only in rural areas has already impacted not only typical-brain-children but more importantly children with needs who are always likely stigmatized & labeled.

The study’s findings reflect the possibility that Multigrade Teaching is likewise effective as a teaching strategy for children with or without needs in non-rural areas.

REFERENCES