

A Challenge Made Easy: Contributing Factors for Successful Multigrade Teaching in a Small School

**Mariyam Shareefa*, Visal Moosa, Rohani Mat Zin,
Nor Zaiham Midawati Abdullah and Rosmawijah Jawawi**

*Sultan Hassanah Bolkuah Institute of Education, Universiti Brunei Darussalam,
Gadong, Jalan Tungku Link, BE1410, Brunei Darussalam*

ABSTRACT

The purpose of this case study is to investigate the factors that contributed to the success of multigrade teaching in a small school in Maldives. Data were collected using semi-structured one-to-one interviews, observation of classroom teaching, and field notes. The interview was conducted with the principal of the school and four teachers who taught in multigrade classes while classroom teaching of three of the teachers were observed. Content analysis of the data revealed four major factors that contributed to successful multigrade teaching; leadership, professional development, structural support, and parent awareness. These factors could be considered to enable multigrade teaching in schools.

Keywords: Leadership, multigrade teaching, parents, professional development, small school

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E-mail addresses

maree2098@gmail.com (Mariyam Shareefa)

visal.moosa@gmail.com (Visal Moosa)

rohani.matzin@ubd.edu.bn (Rohani Mat Zin)

norzaiham.abdullah@ubd.edu.bn (Nor Zaiham Midawati
Abdullah)

rosmawijah.jawawi@ubd.edu.bn (Rosmawijah Jawawi)

*Corresponding author

INTRODUCTION

In schools where the student population is relatively small, Multigrade Teaching (MGT) often becomes the only possible means of formal education (Berry & Little, 2006; Birch & Lally, 1995). MGT refers to two or more grades being combined and taught by a single teacher delivering instructions of multiple curriculum grades simultaneously (Litte, 2006). While MGT may provide certain administrative advantages in small schools, it is also done due to pedagogical choice rather than the

conditions of necessity (Little, 2001). In most cases, classes are merged for two reasons; (i) to address the fluctuating enrolment in large urban or semi-urban schools, and (ii) to organize instruction for students in small schools with fewer teachers than grade levels (Berry, 2001).

In Maldives, where the research was conducted, many of the schools are located in small, scattered islands with very less population. Provision and management of education in these rural islands are challenged by a lack of essential infrastructure and human resources (Ali, 2006). The small number of students in each class makes it difficult for teachers to conduct necessary teaching and learning activities, while students display a lack of motivation and interest in their learning. In response to these concerns, in 2017, the Ministry of Education officially introduced the concept of MGT (Ministry of Education, 2017).

According to Little (2001), MGT is not always easy, and despite its pervasiveness, in many educational systems, the practice of MGT remains extremely limited (Little, 2001). There is limited literature on evidence-based research that is related to the execution of MGT both locally and globally. For the successful enactment of MGT, it is essential to understand the factors that facilitate its implementation. Understanding such factors would assist teachers to create and adopt instructional strategies that are effective and suitable for the curriculum content and the diverse needs of students in multigrade classes. Hence, the purpose of

this case study is to investigate factors that contribute to the successful implementation of MGT in a small school located in one of the islands of Maldives. Identification of these factors could enable the execution of MGT in both small and large schools.

Multigrade Teaching in Different Contexts

In different parts of the world, classes are combined in various ways and for varied reasons. For instance, in the Australian education system, these classes are defined in three main ways: 'composite' classes, 'multigrade' classes, and 'multi-age' classes (Cornish, 2006). 'Composite' classes often consist of a student population comprising more than one grade because the division of students into even-sized classes cannot occur. These classes with 'left-over' children from different grades are established for reasons of administrative and financial expedience. On the other hand, 'multigrade' refers to small rural schools or classes combined with more than two grades, rather than to composite classes in larger schools. 'Multi-age' usually describes larger classes containing several grades formed by choice and on the basis of the type of learning which occurs when children of different stages of development learn together (Cornish, 2006).

In most countries, MGT generally happens to be a forceful reality based on economic and geographic necessity (Miller, 1989). For instance, in developing countries like Myanmar, the prevalence of MGT is so high that half of the primary schools are estimated to have multigrade classes with teachers responsible for more than one grade

at a time (Hardman et al., 2014). Similar to the context of Myanmar, in Bhutan, since MGT was introduced in 1991, a drastic expansion of MGT occurred throughout the country's very remote areas (Kucita et al., 2012). As confirmed by UNESCO (2015), in many cases of these developing countries, MGT is a means of schooling for children who otherwise would not be able to have an education. For this reason, many teachers and even parents often perceive MGT as "second class" instead of quality education. Consequently, countries often try to build more classrooms and hire more teachers, or in worst-case scenarios, the small schools are closed and children are forced to go long distances to attend larger schools (UNESCO, 2015).

In contrast to the tenets of the "second class" label, some developed countries have a long tradition of MGT. In countries like Scandinavia and the United Kingdom (Kvalsund & Hargreaves, 2009), Australia (Cornish, 2006), Austria and Finland (Hyry-Beihammer & Hascher, 2015a), and some American states (Hoffman, 2003), MGT is common not only in rural areas but also in highly populated and developed regions. In most of these contexts, MGT enables the stabilization of student enrolment especially in areas in which birth rates have declined and out-migration has increased (Hyry-Beihammer & Hascher, 2015b). Reasons for the establishment of multigrade systems in these contexts include possibilities for quality education that promotes cohesiveness, cooperation, and healthy competition by strengthening

interpersonal and leadership skills, teacher efficiency, and possibilities for a variety of teaching practices that contributes to students' cognitive development (UNESCO, 2015).

Factors Affecting Implementation of Multigrade Teaching

Numerous factors that enable the successful implementation of MGT are reported in the literature. For instance, a wide-range of literature accentuates the role of schools' leadership and its prominence in enhancing teaching and learning in multigrade schools (Kucita et al., 2012, 2013; Miller, 1989). In addition to the leadership aspect, studies highlighted factors such as teacher training and professional development (Benveniste & Mcewan, 2000; Lingam, 2007; Little, 2001; Miller, 1989; Mulryan-Kyne, 2007; Nawab & Baig, 2011), supervision and monitoring (Kucita et al., 2012; Lingam, 2007; Little, 2001; Mason & Burns, 1997; Miller, 1989; Mulryan-Kyne, 2007), and the instructional and organizational structure of schools (Cornish, 2006; Hyry-Beihammer & Hascher, 2015a; Little, 2001; Mason & Burns, 1997) as crucial elements necessary for the implementation of multigrade teaching.

Teacher training and professional development are important because studies show that teachers trained in multigrade teaching perform better in multigrade classes than untrained teachers or those who are trained only for single-grade education (Brown, 2010). Because of the training, teachers gradually change their perceptions and show readiness to bring a change to the

teaching and learning of small rural schools and their community (Vithanapathirana, 2010). In the same manner, for advancement in the quality of multi-grade schooling, it requires close monitoring and supervision too (Kucita et al., 2013). With clear guidance and close monitoring, teachers can ask questions when they are not clear in their knowledge and practice. Additionally, the instructional and organizational structure established in the school is also important as they have a direct or indirect effect on the processes of teaching and learning (Mason & Burns, 1997). Generally, in schools, classes are structured as combined classes, single-grade classes, or multiage/nongraded classes. However, unlike single-grade classes, in combined and multiage or multigrade classes, a single teacher has the responsibility of delivering the curriculum of two or more grades simultaneously (Veenman, 1995).

After reviewing research concerning the cognitive and non-cognitive effects of the multigrade classroom, Veenman (1995) identified four key factors that might have contributed to the outcomes of MGT: (a) teachers' instructional practices, (b) bias in the composition of multigrade classes, (c) teacher-preparations, and (d) teachers' negative beliefs. These negative beliefs include views such as multigrade classes imposing a greater workload with more preparation time and demanding better classroom management skills. Besides, Veenman (1995) highlighted the importance of spending more time

on the organization and planning of the instructional process too.

Given the range of educational contexts in which MGT is attempted, it is likely that organizational structures and instructional practices will vary across the contexts. Nevertheless, global literature on MGT reveals limited empirical evidence explaining what works well in multigrade classrooms and what needs more attention to make it successful. In the same manner, there is a scarcity of studies both globally and locally which investigated the specific roles of school leadership and their impact on the implementation of MGT. Further, there is a shortage of research investigating specific factors that contribute to the successful implementation of MGT, and this research is an attempt to fill in this gap.

METHODS

This case study employed three types of data collection. These were - semi-structured interviews, classroom observations, and field observation of in-school activities. The aim of using these methods was to seek multiple sources of evidence to explore and interpret the practices of MGT in the context of the study (Merriam, 2009). The interviews would yield detailed information about teachers' first-hand experiences regarding how MGT was implemented in the school. Similarly, classroom observations and field observation of school activities would help to develop a better understanding of what was happening in the school context.

The context of the current study was one small school located in Maldives. To date, there were only a few schools that initiated multigrade classes in the country. The specific school was selected for this study because unlike most of the other schools which reverted back to single graded classes after some time, the school had been continuing the setup to date.

The selected school had grades 1 to 10, and at the time of the study, the student population was 97, with class sizes ranging from 6 to 12 students. Because of the small student population, the Ministry of Education had requested the school to combine grades – subsequently, the school combined Grades 2 and 3, as well as Grades 4 and 5, and initiated MGT in 2016. At the time of the research, these combined classes had 21 and 22 students, and they were in heterogeneous groups. All the teachers working in the school ($N = 22$) had a minimum of a Diploma related to various areas of teaching. In the multigrade classes, a master teacher together with an assistant managed the students, while the rest of the classes were handled by single teachers. In multigrade classes, the assistant teacher plays more of a trivial role compared to the master teacher who takes most of the responsibilities for the instruction. Compared to the assistant teacher, the master teachers are well qualified and experienced, hence, the assistant teacher's role was often to lend a hand in managing the teaching and learning of the students.

The focus of this research is MGT. Consequently, all the participants were

selected based on their experiences in MGT as these were the individuals who could provide more relevant data on MGT. Hence, all the participants of this study were purposively selected, and they included – the school principal, four teachers who were working in the multigrade classes, and one teacher from the mono-grade classes. The mono-grade teacher was selected because she had experiences of teaching a multigrade class for two consecutive years.

Semi-structured interviews and observation of classroom teaching sessions were employed as means for data collection. Additionally, field observations of a professional development session and a staff meeting conducted by the school principal were observed and anecdotal notes were recorded. Once all the raw data were ready for the analysis, the method of thematic analysis (Braun & Clarke, 2016) was adopted to analyze the interview transcripts, and the observation recordings and field notes. Once the initial codes were decided, they were cross-checked for the congruence between the codes and their associated extracts. Following that scrutiny, final codes were deliberated. Next, codes that fitted together were combined and named with appropriate themes. Later, the emerged themes were reviewed and refined.

FINDINGS AND DISCUSSIONS

Analysis of the data from all three sources elicited interesting factors that facilitated the successful implementation of MGT in the selected school. These factors are subsequently presented under four

broad themes; leadership, professional development, structural support, and parent awareness.

Principal's Leadership

Results of the current investigation discovered some leadership practices and beliefs which could be attributed to the successful implementation of MGT in the present case. The most significant among them are (i) a positive attitude towards change, (ii) advocacy, and (iii) monitoring and guidance.

Positive Attitude towards Change. Despite the principal's initial rejection of the idea of MGT, by the time policy directives came from the authorities, the principal not only acquainted himself quickly with the change but also anticipated the resistance that might be faced in the process of transformation from mono-grade to multigrade. The principal's expression that he "was directly opposing that notion of combining grades" clearly illustrated what ensued during the initial stage of the MGT setup. His prompt adjustment to the situation was evident when he said that he "had to open [his] mind to this [new] system" and in doing so he "found [himself] interested in the area" of MGT. As the transition from mono-grade to multigrade was inevitable, the principal expected his school to assimilate without much difficulty: "I wanted our school to be within the comfort zone for experiencing the new setup". Furthermore, the principal's positive attitude towards change was noticed when he emphasized and encouraged teachers to be open-minded and to be

updated with new developments in the field. For instance, "once we took it as a challenge, I told teachers that our school should be the benchmark or the model school in Maldives to have multi-grade teaching", reiterated the principal. Teachers' response to the principal's advice proved that what he uttered was not a one time show off, but rather a repeated reminder.

Conner (1993) pointed out five stages that might accompany change; denial, anger, bargaining, depression, and acceptance. In the present study too, the principal initially rejected the idea of MGT when it was suggested by the seniors. This is evident when he recalled his conversations with seniors, "... during these conversations, I was directly opposing that notion of combining grades. My justification was that such systems were established in poor areas where there were no resources and just for the sake of providing education to the citizens." Nonetheless, by the time it came as a policy directive, he had changed his views which enabled him to present the idea to the teachers and parents in a more convincing manner. As reported by the principal, he has gone through lots of reading on various other countries which detailed their experiences in those respective contexts. Furthermore, the fact that the principal accepted it as a challenge demonstrated his proactive thinking. "I told teachers that our school should be the benchmark or the model school in Maldives to have multi-grade teaching", reiterated the principal. Hence, the principal's decision and effort in establishing MGT in the school

cannot be considered as a mere attempt to follow the system directives, but a more well informed and enthused decision.

Advocacy. Despite the welcoming attitude of the principal, resistance to change from teachers and other staff was still expected. It is because, generally, people have a fear of change as they might have conflicting perspectives between the change and the daily routines or simply feel burdened by the change (Evans, 1996). The attitude of teachers towards the process was clearly indicated when Teacher A said, “Actually before we started multigrade teaching, we were not very much mentally prepared for it. So we had a kind of negative perception.” However, the principal and the school were successful in altering such negative ideas by educating the teachers with the new concept and explaining clearly what the change was all about. The principal explained how he went about in doing so in the following excerpt taken from his interview:

... with the new knowledge, I myself immediately started campaigning for the model of multigrade teaching. I started advocating the ideas to my staff explaining the experiences of these successful countries, presenting the studies and their findings. I tried to convince them based on the light of literature. Before the envoy of MoE came here, I had advocating sessions with the staff and made them aware of the model.

As a result, the efforts of the principal were indeed paid off as exclaimed by Teacher A, “But now [MGT is] very interesting”. Furthermore, observation of the field notes revealed teachers portraying positive behavior about the new setup. Teachers’ engagement in the principal’s professional development (PD) session by responding to various learning activities demonstrated their knowledge about current instructional strategies such as Differentiated Instruction (DI), formative assessment, and use of Individualized Educational Plan (IEP) in addressing student needs in multigrade classes.

The strategies used by the principal in facilitating the change are in line with various suggestions in the literature on change management. For instance, Glickman et al. (2010) suggested a list of things school leaders could do in facilitating the change including building capacity, and provision of necessary support. The efforts exerted by the principal in advocating, educating, and increasing awareness about the change are parallel with this advice. Furthermore, resistance to change can be viewed as a resource for change if the resistance can be reconstructed (Ford et al., 2008) so that the causes for resistance can be appropriately addressed as was successfully done by the principal in the present case.

Monitoring and Guidance. Regular monitoring of practice and providing the necessary professional guidance to the staff are recognized as significant factors in the implementation of MGT in the present case.

Interestingly, teachers perceived the very act of supervision and monitoring in the school very positively as expressed by Teacher B, “our classes are observed and they help us to improve.” The principal explained the monitoring and guidance process as follows:

I focused on all these areas and monitored everything very closely... Our LTs (Leading Teachers) also monitor the lessons regularly. They would try to observe how much DI model is implemented in the classes. And if they happen to witness any mismatch in the teaching, they would directly come to me and give details. And ask for the remedies. For that again, I would prepare a 30 min or one-hour [PD] session.

Staff also expressed their satisfaction with the kind and amount of professional support rendered by the leadership. “Our principal is very helpful. He teaches and guides us a lot”, said teacher C. Teacher B also agreed to this by stating “the management is very supportive”. Moreover, the nature of the support provided by the leadership was explicated by teacher B as follows:

We have weekly PD sessions on various topics. In these PD sessions, the most relevant and immediate topics are presented. All new techniques and strategies were immediately explained and taught to us. In that regard, the

management is very cooperative and supportive.

Evidence for monitoring and guidance was also noticed from the field notes. On one occasion, a leading teacher was having a professional dialogue with the principal regarding the areas in which support was needed for teachers which he had identified from his classroom observations.

The literature emphasizes the importance of ongoing support for teachers in terms of training, experience, and technical expertise which may be very context-specific (Mulryan-Kyne, 2007). The findings of this study indicated that addressing these professional needs of teachers facilitated the implementation of MGT. Furthermore, while teachers generally have a negative perception regarding supervision in schools (Glickman et al., 2010), teachers in the present school perceive it positively. The school’s supervision practices were consistent with the developmental supervision approach where supervision was regarded as a means to help teachers grow professionally (Glickman et al., 2010).

With regard to the leadership aspect, it is reported that educational leaders perceived the quality of instruction in multigrade schools lower than in mono-grade schools (Kucita et al., 2013) indicating a generally negative attitude towards MGT, unlike the case of the present study. However, other studies that were focused on the importance of leadership on managing change and innovation in schools are in support of

the present findings as they emphasize the significant role of leadership in promoting and sustaining change (Hoşgörür, 2016; Kucita et al., 2012; Pashiardis & Kafa, 2015).

Effective Professional Development

Analysis of data revealed that a high emphasis was placed on teachers' professional development in the case investigated. Few notable characteristics were identified from the school-based professional development program that was carried out in the school; (i) on-going, (ii) relevant, and (iii) practical.

On-going Professional Development. The school conducts professional development every week on a continuous basis. The professional development is continuous not only on the basis of the regularity and frequency of the PD sessions but also by being part of everyday conversations among teachers in the school as explicated by the principal. "Whenever I entered the staffroom also, we will be having discussions about topics like five dimensions of the pedagogy, or how to cater to individual needs, or how to differentiate instructions."

Teacher A confirmed the claim made by the principal when she said, "Our principal talks a lot about differentiating instructions... pedagogies and those techniques". Despite the frequency of professional development activities there is still a desire to learn more among the staff as expressed by Teacher C, "But I do believe we still have a lot to improve. We may not be doing it in the best

way. But I am happy that we got the initial training".

Evidence for weekly professional development sessions was found from the records of field observations. In these sessions, teachers shared their experiences and were engaged in interactive discussions.

One of the significant characteristics of effective professional development in schools, as stated in the literature, is that it has to be continuous and on-going. Professional development activities that require active, collaborative participation over time have been found to be particularly effective (Porter et al., 2003). Moreover, research has reported that the amount of time, albeit continuity, is positively associated with teaching practice regardless of the type of activities conducted (Quick et al., 2009). Evidence for frequency, continuity, and extension of PD to classroom practice is illustrated by teacher A as follows: "Whenever, we need any help, with regard to classroom teaching we get help, and the principal will help us. And in the PD we have every week, we focus on multi-grade teaching."

Some researchers argue that lasting change in teacher practices requires months or even years of continued professional development especially when a transition to a new set of practices – like the changing to MGT in the present case – is involved (Loucks-Horsley & Stiegelbauer, 1991). Continuity could also mean extending learning on the same topic for broader understanding allowing teachers to experiment and review new practices in

the classroom (Garet et al., 2001). The following excerpt from teacher C shows that the PD allowed teachers to practice their learning and that the PD was continued from the beginning and throughout.

I believe it is done very well at this school. Because, before starting the model here, we were given the adequate training... And we were made to identify and distinguish the differences and similarities of the syllabus, and were taught about how to join them together. We were also taught how to make a scheme of work and prepare lessons based on that. How to prepare the work... We were made to do it practically before the beginning of everything.

Professional Development Activities are Relevant. Besides being continuous, professional development in the observed school is also found to be relevant; it is not merely a load of information. Conversely, it is related to the content that is to be delivered in the classroom in terms of curriculum and syllabi as Teacher C confirmed that "...the most relevant and immediate topics are presented" in the PD sessions.

In addition to the above, professional development is also relevant to the teaching practices – in terms of delivering the curriculum – that is expected of teachers. The principal related how he had reacted when he knew that teachers were facing difficulties in applying what they learned from the workshops to the classroom activities. "Once, I noticed it (teachers

lacking knowledge on a topic), what I did was prepare some presentations and conduct training sessions for teachers on each of the topic", said the principal. This 'willing to help' attitude of the principal was acknowledged by Teacher A in her statement, "Whenever, we need any help, with regard to classroom teaching we get help, and the principal will help us".

There is a strong emphasis on the existing literature that effective professional development should be relevant to the daily responsibilities of teachers in schools (Hunzicker, 2011). Teachers perceive these activities relevant to them when those activities directly address their specific professional needs and concerns (Guskey, 1995). Evidence of prompt response to teachers' professional needs was apparent in the present case. Furthermore, teachers also view professional development relevant when they see a connection between what is learned and their daily responsibilities (Tate, 2009). The findings of the study showed that professional development was purely focused on implementing the curriculum which is the primary duty of teachers. Thus, professional development activities carried out in the school are relevant and "job embedded" (Hunzicker, 2011) thereby facilitating effective implementation of MGT.

The Professional Learning is Practical.

Everything that is relevant may not necessarily be feasible. For instance, using a variety of information technology resources to cater for a diversity of learners

may be relevant to MGT, and advocated too; whereas it is feasible only if the required resources are made available. The professional development carried out, in the present case, was found to consider its practicality. For instance, Teacher C explained her experience in one of the professional development workshops that were carried out in the following terms, “We were made to do it practically before the beginning of everything”. The principal described the approach he used in a different PD session, “I carried out the sessions like teaching classroom lessons... by showing models”. In this second instance, the principle demonstrated, using concrete examples, how to apply the learning into practical work done by teachers. This shows that what was taught in theory sessions was turned into practical pieces of work that are feasible to be carried out in teaching. The best evidence for the practicality of the PD provided was realized when it was found from the classroom observations that teachers were really using DI (which was the instructional strategy adopted in the multigrade classes) in their actual teaching.

Literature posits a close relationship between relevancy and practicality of professional development activities; the terms ‘relevant’ and ‘authentic’ are frequently used together in which authentic refers to being practical (Hunzicker, 2011). Tate (2009) argued that whatever form the professional development activities might take, if they were extended to follow up activities such as job-embedded projects, then teachers tended to perceive that the

activities were more authentic. As such, the PD activities conducted in the present case are considered as authentic learning activities because there is enough evidence for those learning being applied in teachers’ daily work. Under the best circumstances, teacher learning through professional development is made authentic through the smooth integration of those learning into their daily work (Fullan, 1995).

Existing literature stresses the importance of training and the professional development of teachers for MGT. The provision of special training to teachers of multigrade classes has been found effective (Nawab & Baig, 2011). Moreover, teachers’ failure to use appropriate teaching strategies in multigrade classes is linked to the lack of professional preparation (Lingam, 2007). Finally, while the need for initial teacher preparation for successful MGT is acknowledged, the need for on-going professional support that is specific to multigrade teachers is emphasized (Mulryan-Kyne, 2007). As the teachers in the present school had been trained to teach in mono-grade classes, they were in need of rigorous in-service training and development. The professional development carried out at the school, in this regard, is considered effective as it has entrenched the most important characteristics of successful professional development for teachers as highlighted in the existing literature.

Structural Support

Data analysis of the present study discovered several structural factors that enabled

the effective implementation of MGT in the present case. The most significant among them were; (i) physical setup, (ii) instructional setup, and (iii) administrative and material support.

Physical Setup. As the term implies, multigrade means to accommodate two or more grades in the same physical classroom. Teachers highlighted that initially, it was merely a physical change whereby students of two grades were seated within a single classroom. However, they sat separately as two groups and were instructed by two different teachers. “It’s like two separate classes in one classroom”, added Teacher B; as if they were in two physical rooms. As such, there was no real MGT happening. However, the school’s decision to mix them up to form heterogeneous groups whereby students of two grades were seated together as a thoughtful structural change which allowed MGT in its real meaning.

The immediate effect of this change was the increase in class size. This very fact of increasing the number of students in the classroom was advantageous in a number of ways. For instance, it paved ways for improved student interaction and increased classroom activities so that learning became more lively and interesting for the students. The situation was clearly depicted in the following excerpt from the interview with Teacher B:

Before combining the classes, the total number of students in each class was comparatively less. As a result, students’ interest was very low. Sometimes the

number was about three or four in each class. And they lacked interest and motivation. They did not show many corporations too. But when changed to multigrade classes, there was a tremendous change in students’ attitudes towards their studying.

Additionally, as highlighted by Teacher A, the combination of the grades resulted in academic benefits for students of both grades. It served as a revision for the higher grade students and as a foreshadow for the lower graders while at the same time covering up the content of their respective grade levels. “For grade three students, they always get the chance to recall what they have learned in the previous year. And for grade two, they will know what they are going to learn next year”, said Teacher A. Further, during the classroom observations, it was discovered that students in the multigrade classes were seated in mixed groups and attempting tasks that were relevant to their academic ability level, rather than their respective grade levels.

Previous studies reported certain benefits of MGT that can be related to an increase in class size. They include psychological benefits like improved social interaction among students (Proehl et al., 2013); and improved learning as a result of increased possibilities for classroom activities (Ong et al., 2000). Had the school decided to stick to the initial setup, it would not have been possible to enjoy most of the said benefits. This is evident in such descriptions as a lack of interest and cooperation from students when there were

fewer students in each class before merging the grades. Hence, proper organization and planning of the instructional process are important (Veenman, 1995).

Instructional Setup. The change in the physical setup was followed by a critical change in the instructional setup. The instructional arrangement at the onset of MGT in the present school was explicated by teacher B as follows; “Earlier what we did was we divide the students into two groups and the two teachers work separately with these two groups of students. It’s like two separate classes in one classroom.” As evident from the excerpt, initially, there was no MGT happening at all, apart from keeping the students in the same physical classroom. However, when it was decided to mix-up the student as explained above, the instructional arrangement was changed accordingly so that one teacher would lead the instruction while the other would act as an assistant.

This change was well received by the teachers as stated by teacher B; “Initially, after that change, it was really difficult to follow the setup. But now it isn’t an issue.” The benefit of this change was acknowledged by Teacher A when she stated, “it’s easier when you have an assistant in the class.” Additionally, the role of the assistant teacher was detailed by Teacher C as “she [the assistant] will help when students are engaged in the task. She will monitor, and provide support and guidance to them. And she helps in preparing materials too.” Teacher B added, “After that, the master

teacher conducts the lesson, and the assistant offers the help needed”. Hence, the change in the instructional arrangement, arguably, facilitated MGT in the school.

The findings also indicated that the key instructional strategy employed by the teachers – and that which is advocated by the school leadership – is differentiated instruction. The process of doing this was explicated by Teacher A in the following extract:

In the multigrade class, there are some indicators that are similar to both the grades. In those lessons, I don’t differentiate much from both the grades. But I differentiate into three levels. For the common indicators also, like today, I make sure I differentiate. Almost in every lesson, I tried to differentiate as much as I can.

Evidence for instructions carried out as above was obvious from the field observations. It was discovered that teachers reviewed and adapted curricular materials as an ongoing process. Teachers identified topics that could be integrated and based on that integration, lessons were conducted. It was also found that teachers’ instructional activities were planned to achieve the curriculum indicators that are common to both grades considering students’ levels and abilities. Because of this prudent planning, students were observed to be engaged in the activities, regardless of the grades the materials are suitable to.

The literature on MGT in other countries report the use of teacher assistants (or two

teachers) as identified from the present study. For instance, in Australia, two teachers are involved in teaching to multigrade classes while in Finland an assistant is available to help individual students who require help (Hyry-Beihammer & Hascher, 2015a). Similarly, the availability of full-time aide and other part-time support staff who teach in 'multi-age', inclusive classes was identified in a study conducted in the USA (Hoffman, 2003). Despite the limited literature on MGT and differentiated instruction, there have been reports where teachers teaching one heterogeneous group with the same teaching content and then address the differences in curricula with homogenous groups (Hyry-Beihammer & Hascher, 2015a) which is similar to the case of the present school.

Administrative and Material Support.

Analysis of data from the present case informs that teachers were given sufficient support in terms of materials and administrative arrangements. For instance, teacher A related her satisfaction in terms of teaching-related resources and facilities, "Most of the resources are actually available here. And we don't have any issues in printing". Previous studies reported that an insufficient amount of teaching resource materials available to teachers as a factor inhibiting MGT in those cases (Benveniste & Mcewan, 2000; Kucita et al., 2012). In case such resources are not readily available, teachers can be encouraged to be innovative in using materials that are locally available (Nawab & Baig, 2011).

In addition to that, the management of the present school has arranged administrative staff to help teachers in many of the additional duties of teachers. The field notes provided evidence for administrative staff assuming such responsibilities as executing works related to co-curricular activities which are generally viewed as an extra burden to teachers. MGT requires additional time for preparation and planning (Veenman, 1995), and as such high workload and lack of preparation times are reported as challenges to proper implementation of MGT (Hyry-Beihammer & Hascher, 2015a; Nawab & Baig, 2011). Support from the school administration, as in the present case, reduced the adverse influence of such factors thereby facilitating the smooth operation of the setup.

Awareness of Parents

The final, yet a very critical factor for MGT identified from the present study was parents' awareness. It is found that, unless provided with proper information, parents could exert a detrimental influence on MGT. In fact, there have been reports from fellow principals that, in Maldives, some schools had to abandon MGT set up due to increased pressure from parents. In the present case, the school management was proactive and reached to parents in time with the right information as explicated by the principal; "Assuming that people might not accept this model, before the beginning of multigrade teaching, I had well-prepared meetings with influential parents and tried to make them

aware about policies, and how the model works in other countries”.

Indeed, parents had some negative perceptions regarding the changes associated with MGT as expressed by Teacher A, “Parents’ perceptions were also like ours. They also had some negative perception before.” As such, parent awareness programs were conducted and their concerns were taken into consideration. Occasions on which the principal talked and interviewed parents regarding MGT were also found from the field observation notes. Furthermore, the materials prepared by the principal for awareness programs had evidence of his efforts for advocacy.

Existing literature suggests that parents have a mixed perception of MGT (Kucita et al., 2013). While some parents are happy that their children are at least going to school because of the special arrangement, others are skeptical about the effectiveness of the approach in terms of learning for their children. Kucita et al. (2013) argued that “if parents are not aware of the benefits or importance of multigrade schooling, they may not support such schools or take their children to them”. Hence, more effort should be exerted in convincing parents and community that MGT is necessary (at times) and legitimate and also proven effective when done properly (Kucita & Maxwell, 2016)

In the present case, the school’s efforts to bring the parents on-board were worth it. “So due to these efforts of advocacy, we did not experience many challenges from the parents... there wasn’t much of tension

to accept multigrade teaching”, stated the principal. Teacher A also related parents’ expression towards the initiative as follows: “But now some parents during PTS (parent-teacher-student) meeting, they say now they are happy about multigrade teaching.” Thus, creating awareness among the parents was an essential ingredient for the success of MGT in the present school.

CONCLUSIONS AND IMPLICATIONS

The present study identified four key factors that were associated with MGT: leadership, professional development, structural support, and parent awareness. Having a positive attitude, advocacy, clear vision, and monitoring and guidance were identified as major leadership characteristics. It is argued that all the aspects of leadership identified in this study are interconnected – they are not ‘piecemeal, but ‘part and parcel’ of the leadership practices for the successful enactment of MGT. Hence, school leaders should pay attention to all these components.

The study also found that professional development carried in the present school was on-going, relevant, and practical. While existing literature emphasizes the importance of pre-service teacher preparation for MGT, in-service professional development with the above features is also essential. School-based professional development that can cater to the specific needs of the school may be the relevant approach to achieve this.

It was evident from the present study that structural aspects in terms of physical, instructional, and administrative arrangements facilitated MGT. The findings

also indicate that simply combining two grades is not parallel to teaching in a multigrade setup. Rather putting them into heterogeneous groups and basing the instruction on the common curriculum goals is one possible means for doing it. As DI strategies employed in the present school is in line with instructional practices in other contexts, it is postulated that DI can be a suitable instructional approach that can be adopted in MGT. Along with this, due to the increased diversity of students, the provision of an additional teacher or a teacher assistant is mandatory in multigrade classes. Furthermore, since the outcomes of the combined two grades were fruitful in the context of the study, it could be postulated that MGT can be expanded to the other grades of the school.

Lastly, the findings of the present study reveal that parent awareness is a crucial factor in the implementation of MGT. As literature reports that negative perception of parents could impede MGT, educating them on related aspects cannot be left unattended.

Limitations

The present study is constrained with certain limitations. Firstly, owing to the case study design of the current investigation, its findings cannot be generalized. Hence, similar studies could be replicated in different contexts to elicit a broader understating. In this regard, the case of a school where MGT was unsuccessful can be considered. Additionally, quantitative studies are needed to enable the generalisation of the results to similar contexts. Secondly, it is not

possible to comment on the sustainability of the practices since data collection was cross-sectional. Despite the use of multiple sources of data, they were all collected only once and at one point in time. Thus, a repetition of the same study in the future is required in or to confirm the findings. Finally, as the study is limited to the views of the principal and the teachers, to compare multiple perspectives, parents' as well as students' viewpoints could be included in future studies.

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