

Available online at ijci.wcci-international.org



International Journal of Curriculum and Instruction 12(Special Issue) (2020) 359–378

Teaching and Learning in Multi-graded Classrooms: Is it Sustainable?

Hale Erden a *

^a Orcid ID: https://orcid.org/0000-0003-4177-6203, Assoc. Prof. Dr., Cyprus Social Sciences University, Nicosia, Mersin 10 Turkey, Cyprus

Abstract

The objective of the current study was to determine whether it was sustainable to teach and learn in multigraded classrooms. This paper reports on an investigation into experiences of key stakeholders regarding difficulties and the factors contributing to the difficulties faced throughout the process of teaching and learning in multi-graded classrooms in North Cyprus schools. The aim of the study was to identify the difficulties contributing to the learning and teaching in multi-graded classrooms and determine on the factors contributing to the difficulties faced according to the experiences, beliefs and perspectives by the core participants. The study employed the qualitative approach while collecting data, using interviews and observation checklists. Semi-structured interviews with teachers (N=20) and administrators (N=10) as well as focus group interviews with students and their parents (N=100) were conducted to identify the difficulties as well as factors contributing to the identified difficulties faced throughout the multi-graded teaching and learning process. Student observations were also employed in the classroom atmosphere. Qualitative phenomenology design was used for data collection of the study. Qualitative data were collected through semi-structured interviews, focus group interviews and observation checklists, which were analyzed using content analysis. Results maintained that there are certain difficulties and certain factors contributing to such difficulties. Difficulties include management, effective teaching and learning strategies and assessment in the multi-graded classrooms. Factors contributing to such difficulties cover organization of the curriculum, management in the classroom and lack of support.

© 2016 IJCI & the Authors. Published by *International Journal of Curriculum and Instruction (IJCI)*. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (CC BY-NC-ND) (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Keywords: Assessing learning and teaching performance; classroom management; effective teaching strategies; planning teaching; sustainability

 $^{^{*}}$ Corresponding author name. Tel.: +0-000-000-0000 E- $mail\ address$: hale.erden@kisbu.edu.tr

360

1. Introduction

1.1. Introduce the problem

Teaching taking place in combined grades and groups in a classroom is better known as multi-graded teaching. One can only assume the difficulties teachers and students experience while teaching and learning take place in multi-graded classrooms. The innovation level and creativity level must become known in the teaching-learning environment to improve and make such actions sustainable. Multi-graded teaching refers to teaching in a single class with more than one student grade level (Berry, 2006; Hargraves, 2000). A multi-graded classroom has only one teacher with more than one grade in the same class (Little et. al, 2007; Brown, 2010; Thalheimer, 2010). The importance is on teachers' understanding the process in order to create and implement in multi-graded classes and while shaping their methodologies (Brown, 2010). Similarly, maintaining effective learning for the students depend on schools' being well-organized and well-resourced as well as having well-trained teachers (Juvane, 2005). On the other hand, multi-graded teaching has its own set of challenges and benefits as well as special advantages, despite the constraints (Little, 2004; Beukes, 2006). Studies concluded that multi-graded classes are necessitated due to the chronic scarcity of teachers, shortage of pupils, deficiencies in physical resources like an inadequate number of classrooms and the size of these classrooms (Little, 1995; Hargreaves, 2000; Little, Pridmore, Bajracharya & Vithanaphathivana, 2007; UNESCO IICBA Newsletter, 2010). Similarly, they are associated with the countries, which are still developing and have wide variety of reasons for existing (Wallace, McNish & Allen, 2001). Their existing reasons include excessive socio-economic restrictions, shortage in population from the closer community, insufficient resources as well as communities' conditions regarding geography and culture (Wallace et. all, 2001). Also, multi-graded teaching exist at schools in the areas where there is low population density, where there is a cluster of classrooms located at places, where there is inadequate number of teachers and students, where there is higher levels of teacher absenteeism and where there is multi-graded teaching and learning occurring due to pedagogical reasons (Little, 2004). Thus, multi-graded classes exist both in poor and developing countries as well as in rich countries (Jordaan, 2006). Similarly, multi-graded teaching is widespread both in rural schools as well as in urban schools (Joubert, 2010). Additionally, multi-graded teaching is associated with small schools in remote and sparsely populated areas (Jordaan, 2006). Also, multi-graded teaching, a pedagogic teaching strategy, is applied in rural schools mostly (Makoelle & Malindi, 2014). Challenges faced by the teachers while learning in a multi-graded classroom include lack of suitable training, lack of enough support from key stakeholders, lack of proper resources and lack of enough number of organized workshops for the teachers of multi-graded classrooms. Such kind of challenges does not make teaching and learning easier for teachers and school conditions as well as community conditions are not conducive to desired teaching and learning outcomes. It should be accepted that due to challenges they face, teachers truly depend on their professionalism on teaching, their knowledge, which they define their knowledge as deep contextual, reflexive and adaptive, helping them to activate teaching and learning (Ramrathon & Ngubane, 2013).

Identified core aspects of multi-graded teaching are positioning the attitudes of teachers, increasing the level of awareness, adaptation of curriculum, expressing learning's philosophy, designing learning materials, organizing the students socially, transforming the assessment systems as well as improving the significance of teacher's knowledge and skills as essential aspects in multi-graded teaching (Brown, 2010). Similarly, identified key areas of multi-graded teacher training programme are the management of the classroom, the strategies for instruction, the curriculum itself, the materials for instruction and the involvement of the community (Beukes, 2006). Core aspects and key areas are fundamental issues require consideration while teaching and learning at multi-graded classrooms to manage effective and fruitful teaching and learning.

An identified barrier to the multi-graded teaching is on managing the classroom because while one group is busy with a task, the teacher is busy with teaching another group (Taole & Mncube, 2012). It is observed that students end up finishing the learning tasks without supervision of the teacher. Similarly, managing time effectively as well as maintaining parent and community relationships are the aspects needed to be promoted to build fruitful multi-graded teaching and learning experiences (Mulyran-Kyne, 2007). Despite the difficulties faced, multi-graded teaching and learning involve some advantages such as having adaptable flexible schedules, creating more opportunities to promote and resourceful learning, to learn more in informal classroom atmosphere and with friendly relationships (Jordaan, 2006). Organizational strategies proven to be beneficial for multi-graded teaching and learning atmosphere include some schedules and routines promoting clear and predictable patterns, enhancing students' responsibility in order to feed their own learning opportunities as well as using the time for promoting experiences on group learning across and within levels of each year, for developing skills and strategies allowing learners to maintain higher levels of independence of their individual learning or combination with others as well as for developing strategies and routines for promoting peer tutoring (Pancoe, 2006).

When there is not any different curriculum between multi-graded classrooms and mono-graded classrooms, and all grades use the same textbooks, then the national curriculum becomes flexible and graded. Fewer amounts of trainings are supplied for multi-graded teachers. Similarly, trainings supplied for mono-graded teachers are taught to be enough for multi-graded teachers since teachers of mono-graded are supposed to teach in multi-graded classes as well. Being absent in getting appropriate and required training for teachers who teach in multi-graded classrooms, being absent in obtaining

appropriate human, physical resources as well as being absent in maintaining the necessary support by the key educators block off delivering the quality training. Building multi-graded teaching strategies have been impeded by the reality that most of the educators do not prefer to live in rural areas of the countries, where most of the multi-graded classrooms have to be applied (Taole & Mncube, 2012). Most of the teachers teaching at multi-graded classrooms revealed that they found multi-graded teaching difficult and challenging. They added that they were feeling alone and not know exactly what was clearly expected from them to do (Taole, 2014).

Teachers teaching in multi-graded classrooms require having best skills on classroom management because they need to do appropriate planning of their classes in order to avoid being unnecessary (Taole & Mncube, 2012). Tasks should be in parallel in each classroom where carrying out tasks in one grade may need higher level of contact by teacher-learner or lower level of contact by teacher-learner in another grade. Strategies offered for a multi-graded classroom teaching and learning include process approach, moving from all-knowing facilitator, integrating related areas of the curriculum across grades and ensuring to form flexible groups in the classroom (Beukes, 2006). Similarly, approaches to curriculum for multi-graded classrooms are spans of multi-graded curriculum, differentiated curriculum, apparently one-graded curriculum, learner centered curriculum and material centered curriculum (Little, 2004; Little et al, 2007).

Multi-graded teaching has got three important approaches, which are called whole-class teaching, learning-in-groups and independent working (Jordaan, 2006). Similarly, the approaches teachers use while teaching in multi-graded classrooms include two-group approach (where two different groups come to together for pedagogical reasons), whole class approach (where all of the students sharing the same class study and learn at the same time) and mixed-approach (where mixed grade activities are offered) (Jordaan, 2006; Wallace et al, 2001). Additionally, cooperative learning has been strongly suggested to be in use in multi-graded classrooms because cooperative learning is peculiar of involving all grades and student achievements; showing a great deal of subject matter, showing urban and/or rural schools and showing a common goal for learners of mixed ability as well as having increased acceptance among others, have positive self-esteem and providing positive interaction (Fyfe, 2001). On the other hand, instructional strategies used in multi-graded classrooms are identified as peer-to-peer instruction, cooperative group work and individualized learning programmes (Jordaan, 2006).

Similarly, peer-tutoring is a teaching strategy suggested to be used while teaching in multi-graded classrooms (Jordaan, 2006; Pancoe, 2006; Wallace et. al, 2001). Peer-tutoring has been defined as teaching of learner to learner (Wallace et al, 2001) or teaching of older learner to younger learner (at higher levels), fast learner to slower learner (at the same levels), learning of two learners at the same level (through discussions helping each other to learn the topic better), and/or slower learners to fast

learners in the topics where slower learners are stronger (Wallace et al, 2001). Among the various teaching approaches, multi-graded classroom teachers require to choose the most appropriate approach while teaching in their classes. When the classroom approach has been preferred to use, then the multi-graded teacher should decide to the organization of the classroom.

The organization of the classroom is important since each multi-graded classroom should have various appropriate approaches to adopt. The selected appropriate approach will firmly decide on the organization of the classroom, its environment and materials. Activity centers are strongly suggested to organize in the classroom. Each activity center, which is placed at the corners of the classroom in order not to disturb and block other activities, should be categorized according to its topics and themes (Wallace et al, 2001). Adopting workstations, activity centers and/or reading corners to facilitate learning of the students is also beneficial. Activity centers, workstations and/or reading corners are required to involve various resources to help students' learning better. Teachers in such classes are required to feature new methods, be advanced and original while learning takes place as well as innovative and flexible while organizing the classroom to facilitate learning in various ways (Ministry of Basic and Secondary Education in Collaboration with the Learning Initiatives for Rural Education, 2008; Dima & Borcos, 2005; Hilberg, Chang & Epaloose, 2003; Hill, 2000).

1.2. Aim of the study

The current study sought to determine whether teaching and learning is sustainable in multi-graded classrooms. Specifically, this study was designed to identify the experiences, beliefs and perspectives regarding the difficulties faced while teaching and learning in multi-graded classrooms in North Cyprus' schools and to address the following research questions: What difficulties do teachers and students report that contribute to teaching and learning in a multi-graded classroom? and What factors were reported as contributing to the difficulties faced according to the experiences, beliefs and perspectives by the core participants?

2. Method

2.1. Research Design

To address the research questions, a qualitative research methodology was applied. The current study provided qualitative data to address the research question, which sought to explore the difficulties experienced and factors contributing to these difficulties throughout teaching and learning in the multi-graded classrooms. The responses of the participants were analyzed thematically using phenomenology, including exploring the difficulties and factors contributing to these factors. Themes on difficulties and

364

contributing factors to these difficulties, participants believed and experienced while teaching and learning in the multi-graded classrooms, were described throughout this study.

2.2. Participant (subject) characteristics and sampling procedures

In the current study, data were collected from 20 teachers (teachers teaching at multigraded classrooms of various schools in North Cyprus) and 50 students and 50 parents (25 students from each grade with their parents; Grade 4-to-Grade 5; students' ages ranged from 9-to-10 years) and 10 administrators serving in these schools where MG teaching and learning takes place to explore the difficulties faced in multi-graded classrooms. The students were chosen among the ones who were active in sports/music, had GPA between 8,50-10 out of 10 and were described as having higher level of interpersonal skills by their form teachers. The range of interpersonal skills were agreed to be ability to communicate, ability to show empathy, ability to work in a team, ability to negotiate-persuade-influence others, ability to resolve conflict-mediate, and ability to solve problems-make decisions. The teachers' teaching experiences ranged from 5-to-15 years. Only 8% of the teachers had less than 10 years of experience in teaching multigraded classrooms. Only 2 teachers held bachelors' degree, 18 of them held masters' degree or pursuing their masters' studies. Purposive sampling was applied in selecting the participants to ensure that key participants were appropriately selected for the case. Tustin, Lightelm, Martins and Van Wyk (2005) implied that the participants, chosen with a specific purpose and/or objective in mind, were intentionally selected for meeting the criteria of purposive sampling.

2.3. Measures and covariates

The semi-structured interview form1 was used to identify the difficulties teachers and students face while teaching and learning in a multi-graded classroom. Semi-structured interview from 2 was applied to identify the factors contributing to these difficulties. Teachers and administrators were interviewed face-to-face. Students and parents were focus-group-interviewed. Observation checklists were used while observing the students in their classes on how they learn in their authentic environment. In the first phase of the study, the core participants were asked to identify the difficulties they face contributing to their teaching and learning in a multi-graded classroom. In the second phase of the study, the core participants were asked to identify the factors contributing to the difficulties identified in the initial phase of the study.

In the current study, data were collected from 20 teachers, 100 students and their parents (50 students and 50 parents) and 10 administrators. Primary qualitative data included semi-structured interviews and focus group interviews with basic questions to describe their experiences, beliefs and perspectives regarding the difficulties they face while teaching and learning in multi-graded classrooms and then the factors contributing to these difficulties. An interview protocol was applied to guide the interviews. The focus of the interviews was on identifying the difficulties to describe them as variables and then the factors contributing to the identified difficulties. Appointments were taken from participants to conduct face-to-face interviews and focus group interviews in each phase. Students were observed in the real classroom atmosphere through observation checklists. Convenient time for each participant or each group was arranged to process the interviews. The researcher tape-recorded the interviews, took notes during the interviews and ticked the checklists while observing the students in the classroom. The interviews were transcribed. The researcher read through all the transcripts, wrote down all the ideas that came to mind, selected one best interview and asked questions about it. Then the researcher clustered similar topics together, identified major topics, unique topics and minor topics to elicit categories. Topics were grouped. Grouped topics yielded to connections and themes to determine. Data for each category were gathered in one place. Qualitative analyses were conducted with responses from the core participants in order to identify the difficulties contributing to the teaching and learning process of multigraded classrooms and to identify the factors contributing to the difficulties identified. Responses ranged from one-word to short paragraphs of various sentences. In the current study, strategies from content analysis were used to analyze the data. Several strategies were applied throughout the study to ensure trustworthiness of the findings. A team of academics from the educational sciences field was convened to review the data to supply the content validity. Member triangulation was supplied through collecting data from teachers, students and administrators.

Data were collected, analyzed and interpreted impartially in order to avoid bias by the researcher. Implications produced through the research generate enough information for the educational professionals. How data were collected, analyzed, how themes were derived and how the results were maintained were described in detail in the study in order to increase the opportunity of replication of the study. The qualitative data were analyzed through description of thematic interpretations and the quantitative data were analyzed using descriptive statistics, where procedures for various data collection and data analysis methods were explained in detail in the study. Also, the interviews were recorded and preserved as a future reference for any independent researcher. Data were collected, analyzed and interpreted impartially in order to avoid bias by the researcher. Implications produced through the research generate enough information for the educational professionals. How data were collected, analyzed, how themes were derived and how the results were maintained were described in detail in the study in order to increase the opportunity of replication of the study. The qualitative data were analyzed through description of thematic interpretations and the quantitative data were analyzed using descriptive statistics, where procedures for various data collection and data analysis methods were explained in detail in the study. Also, the interviews were recorded and preserved as a future reference for any independent researcher.

3. Results

Findings from the analysis of the data suggested two primary core categories, several themes, sub-themes and the issues based on the primary categories, themes and sub-themes. This section attempted to answer the research questions on what difficulties were faced while teaching and learning in multi-graded classrooms and what factors contribute to the difficulties faced according to the experiences, beliefs and perspectives by the core participants. The core categories emerged from the participants' responses were *Difficulties faced on sustainability* and *Contributing factors* (see Figure 1).

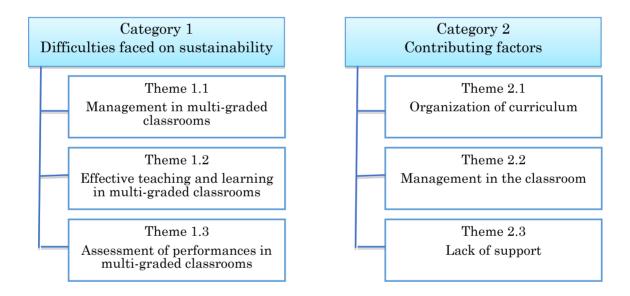


Figure 1. Categories and Themes

3.1. Category 1: Difficulties Faced on Sustainability

These identified core categories included responses describing the significance of multi-graded teaching and learning as well as the ways in which the core difficulties and the factors contributing to these difficulties gave rise to implications for the educational politicians and educational planners to give necessary support to the multi-graded classrooms. Specifically, the core participants noted that difficulties include *Management in multi-graded classrooms*; *Effective teaching and learning in multi-graded classrooms*, and *Assessment of performances in multi-graded classrooms* as themes.

3.1.1. Theme 1.1: Management in multi-graded classrooms

Illustrative quotes include the sub-themes regarding the theme Management in multigraded classrooms as Teacher, Classroom and Student. The sub-theme on Teacher gave rise to the issues on Managing professional knowledge and skills and Managing research. Similarly, the sub-theme on Classroom gave rise to the issues on Promoting positive pedagogical environment and Managing highly interactional tasks. Also, the sub-theme on Student gave rise to the issues on Engaging students, Breaking isolation among students and Having highly satisfaction by learners-parents-teachers (see Figure 2).

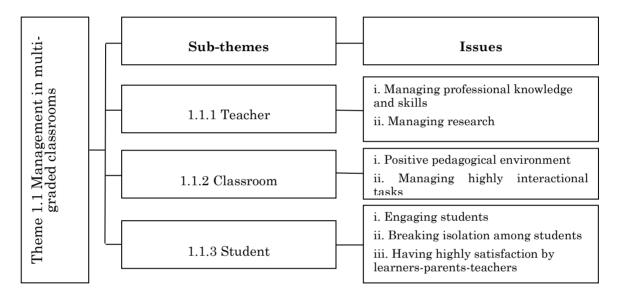


Figure 2. Theme 1.1 Management in multi-graded classrooms

The quotes regarding the theme *Management in multi-graded classrooms* from the participants put forward that teachers and managers need to well aware of the varieties and levels of the students. Their age, gender, family-based-background, socio-economic-based-background, abilities in learning and using language/s, skills and abilities of their ages, special needs in order to maintain powerful and effective educational outcomes. Also, the teachers of such kind classes need to observe each student closely, keep an eye on their improvement and conduct researches in each step to make sure that each student promotes considerable development in the class. Additionally, they should provide positive impact on the student achievement, be creative in managing and arranging the grades while planning the tasks, working plans and peer learning. Teachers should be aware of the importance of focusing on the communication, reproducing learning tasks and shifting in the role of the responsibility because teachers should have more focus on learning of their students and each student may bring various educational needs into the classroom.

The participants emphasized that every circumstance mentioned above should be a way of making each circumstance possible in order to supply better teaching and learning conditions. Similarly, the participants emphasized that teachers of multi-graded classrooms are required to introduce new methods in order to keep each student busy in the real classroom atmosphere. Also, the role of the students and the teachers should be made clear. The students should produce while learning, rather than listening to the teacher, the authority, all the time. By the same token, the teachers need to be innovative while developing, designing, applying, producing and reproducing the teaching and learning materials.

3.1.2. Theme 2: Effective teaching and learning in multi-graded classrooms

Next prominent theme emerged from the category on Difficulties faced on sustainability was called Effective teaching and learning in multi-graded classrooms. The theme yielded sub-themes on Adaptation of lesson plans, Production of teaching and learning materials and Development of teaching strategies. The sub-theme on Adaptation of lesson plans yielded issues on Monitoring the progress of students whereas the sub-theme on Production of teaching and learning materials gave rise to issues on Designing effective instructional materials and Designing authentic materials. The sub-theme on the Development of teaching strategies yielded an issue on Teaching all groups together (see Figure 3).

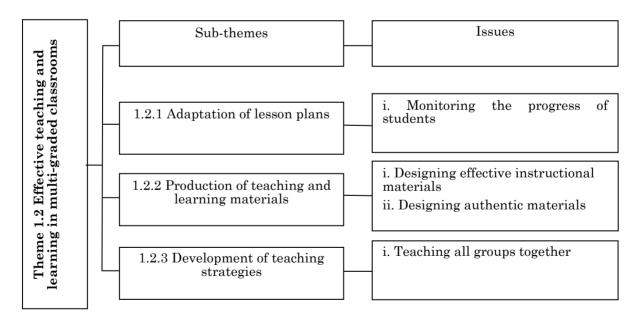


Figure 3. Theme 1.2 Effective teaching and learning in multi-graded classrooms

The quotes regarding the theme Effective teaching and learning in multi-graded classrooms from the participants emphasized that it was necessarily important to improve the education quality, plan lessons appropriately, and select week-activities in order to get ready for the timetable. Also, quotes from the participants revealed that it was vital to save time in the classroom, maximize the time of students' spending on learning tasks, develop adequate as well as proper instructional materials and encourage learners to produce their learning materials. Teachers of such kind classrooms should add locally resources to the actual teaching and learning repertoire. They need to (re)design locally available materials by considering their local context and culture. Teachers and higher-grade students while (re)designing the local materials may bring teaching and learning pieces closer both to the available resources and local conditions. Designing authentic materials and activities with the involvement of the students and the related authorities will be helpful in mildly combining the curriculum and the local culture. Therefore, the participants' quotes put forward on the importance of designing authentic materials to promote local context and local culture. Also, a multi-graded teacher is required to use time appropriately; be flexible while managing time; balance the attention of fast learners and slow learners; use fast learners as peer tutors to the weak students when they need extra attention because the teachers need to move from one group to another in the same class. Similarly, a multi-graded teacher is required to be creative enough while managing the classroom, arranging the grades, groups and/or individual works either in the similar grade or group or independently. Also, the teachers of such kind of classrooms should focus on teaching one-grade while the others work independently, and/or focus on teaching one subject to all grades and at varying levels of difficulty, and/or focus on developing activities for non-taught groups, and/or focus on developing peer, cross age and cross grade teaching strategies.

3.1.3. Theme 3: Assessment of performances in multi-graded classrooms

The code on Difficulties on sustainability generated a theme called Assessment of performances in multi-graded classrooms. The theme yielded sub-themes on Adapting on more learners' assessment but less evaluation and (Self) Reflection of teachers and students. Participants agreed that the issues on Adapting on more learners' assessment but less evaluation gave rise to Adopt a cyclic process of assessment, Assess prior knowledge of learners, Reflect on teaching and strategies of assessment, Revisit and replan the lesson, Implement the lesson, Identify areas where students need help and provide additional learning opportunities. Similarly, participants revealed that the issue on (Self)Reflection of teachers and students gave rise to express self-criticism, be strategic and assertive as well as have strong will on making changes and sacrifices (see Figure 4).

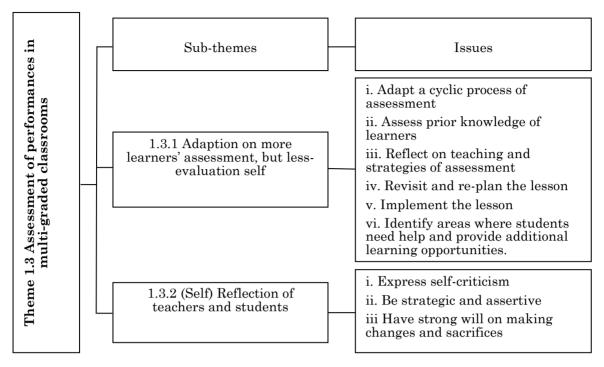


Figure 4. Theme 1.3 Assessment of performances in multi-graded classrooms

The quotes from the participants regarding the sub-theme called *Assessment of performances in multi-graded classrooms* put forward that a multi-graded teacher needs to design or produce every teaching and learning pieces as well as assessment strategies to meet the individual requirements of the students. This is because each student has got different backgrounds, learning styles and needs. Therefore, strategies of each multi-graded classroom teacher should meet such styles and needs of each student. (Self)Reflection is real necessity on the part of the teachers, which will facilitate the job of the teachers in order to identify children who are at-risk group, criticize the progress of the program, students' progress and teacher's progress while applying the program. Therefore, each multi-graded teacher will be able to give extra attention to each student and make sure that they succeed.

3.2. Category 2: Contributing factors

The next core category was called *Contributing factors and* there were 3 themes emerged from the category. The themes were called *Organization of curriculum, Management in the classroom* and *Lack of support.*

3.2.1. Theme 1: Organization of curriculum

The theme on *Organization of curriculum* gave rise to sub-themes on *Having lack of innovativeness* and *Challenging with teacher's burnout*. The sub-theme on *Having lack of innovativeness* yielded issues on *New learning* and *Old learning*. Similarly, the sub-theme on *Challenging with teachers' burn out* gave rise to *Work overload* (see Figure 5).

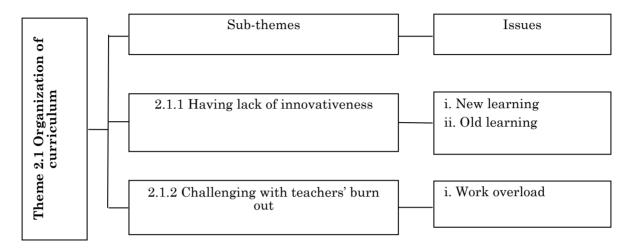


Figure 5. Theme 2.1 Organization of curriculum

The quotes regarding the theme *Organization of curriculum* from the participants emphasized that whenever a topic has been introduced, the complexity of the topic should increase, and new learning points can be able to build upon the old learning points each time. Similarly, the new learning point has been in relationship with the older one to be able to put the new learning and old learning in the context. Teachers of such kind classes have work overloads since they have various grades in their classes to deal with each time. Curriculum they use need to help them to promote positive outcomes especially while applying their teaching skills and facilitate inquiry-based, project based and constructivist approaches. Therefore, teachers should be able to activate prior knowledge in order to build new learning on prior knowledge and to help their students to develop their levels.

3.2.2. Theme 2: Management in the classroom

Similarly, the theme on Management in the classroom yielded the sub-themes on Arranging climate of the school, designing atmosphere of the classroom and Improving learners' performance. The sub-theme on Arranging climate of the school yielded an issue on Arranging activity centers and workstations each corner and Maintaining peace and being fair among students. The sub-theme on Designing atmosphere of the classroom yielded an issue on Teacher's readiness whereas the sub-theme on Improving learners'

performance yielded issues on Learner's diversity and complexity and Level of interpersonal skills of the learners (see Figure 6).

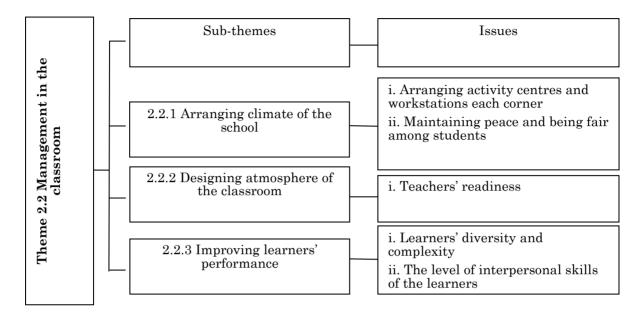


Figure 6. Theme 2.2 Management in the classroom

The quotes regarding the theme *Management in the classroom* from the participants emphasized that the atmosphere of the classroom should be healthy, inclusive and safe for each student from various backgrounds, abilities and needs. Interactional tasks influencing and answering the needs of students from each gender promote participation and success of the students in the classroom. Workstations and activity centers where each student find him/herself in the activity should be included inside the classroom. At each station and/or center, the student should have new information and/or activity to go further. Therefore, activities and/or tasks should be arranged according to the level, age, interest and/or knowledge of the students. Teachers of such kind of classes should be denoted with enough professional knowledge and professional experience.

3.2.3. Theme 3: Lack of support

Finally, the theme on Lack of support gave rise to the sub-theme on Lack of self-motivation, Lack of being open to personal professional development and Lower level of motivation by managers. The sub-theme on Lack of self-motivation yielded issues on Well-organized teachers, Creative and flexible teachers, Highly motivated teachers to work hard, Resourceful teachers, Self-directed teachers, Highly motivated teachers cooperating with the parents, the community and the local authority, and Willing teachers to develop cooperation and personal responsibility in the classroom and with the students. Also, the

sub-theme on Lack of being open to personal professional development gave rise to an issue on Need to feed teachers' reduced motivation in attending in-service trainings. On the other hand, the sub-theme on Lower level of motivation by managers yielded issues on Creating a supportive school culture, Providing opportunities to learn multi-grade teaching methods, Monitoring progress of implementation, Praising teachers and Facilitating positive, cooperative interaction among teaching team-members (see Figure 7).

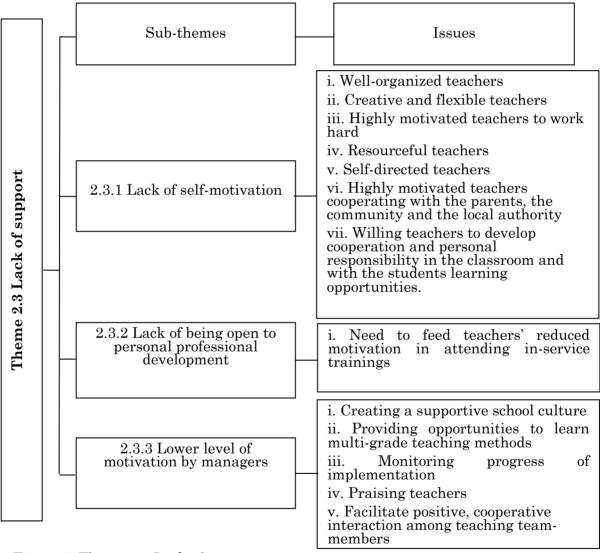


Figure 7. Theme 2.3 Lack of support

The quotes regarding the theme Lack of support from the participants emphasized that a multi-graded teacher needs to work in collaboration with colleagues, parents as well as

with local authority in order to use available resources, to raise self-teaching and self-assessment methods to break isolation among students, to develop a school improvement plan, to mobilize support from interested, powerful, spontaneous as well as disinterested parents, and to gain support from local society leaders. Similarly, a multi-graded classroom teacher should be ready to attend to the in-service training programs for getting more training, acquiring new skills, experiences and attitudes. Multi-graded classroom teachers who are in favor of getting in-service trainings gain more experience, excel their teaching profession and share experiences from other colleagues from other schools. Therefore, managers should encourage multi-graded classroom teachers in their schools to attend in-service programs and suggest the best strategies to the educational authorities how to organize and sustain such kind of trainings.

4. Discussion

Promoting teaching and learning in multi-graded classes sustainably as a means of developing new and better practices, promoting regular reflection on the teaching skills, strategies and methods seems to be possible in every way by keeping the record of each student, by promoting teaching activities (how the lessons are planned, the classroom is managed, subjects are (re)scheduled, instructional resources are developed, appropriate tasks are assigned to guide and counsel students with various learning challenges, records of teaching and learning activities are kept, parents are directed in monitoring the progress of their children and local authority is assisted to arrange conditions of learning); by maintaining assessment from various ways (through principal and colleagues, as well as by getting informal feedback from students on what and why they (dis)like about the classroom atmosphere, on what individual lessons periodically reflect, on how activities were handled and on what kinds of results were achieved). Multigraded teaching has positive contribution to human development sustainably (Brown, 2010) and to students' achievement (McEwan, 2008). It is better to integrate teachertraining program with multi-graded teaching strategies while carrying out initial teacher training studies of the teachers to make them know they may teach in a multi-graded school. Also, there is a need to establish a well-coordinated support system from top to bottom level (from national level, provincial level and district level to school level) to facilitate teachers' difficulties and challenges they face while teaching in multi-graded classrooms (Joyce, 2014). The learning environment should be well designed and supported to enrich formal learning by integrating it with technology (Mercier, Higgins & Joyce-Gibbons, 2016). Additionally, teachers required to are work-in-teams collaboratively, be friendly and agree to get support from workshops and school-based facilities (Vithanapathirana, 2005).

The practical section of the lessons yielded positive contribution to the students' way of thinking regarding development on identity as teachers which also supported teachers' improvement, their awareness on the need of improving, shaping and reshaping their identity (Seban, 2015). A finding by Makoelle and Malindi (2014) emphasized the importance of well-designing teaching practices to enhance multi-graded pedagogy and promote learning in such classes since knowledge and skills required for multi-graded teachers unfortunately were limited. Therefore, well-implemented policies identifying, acknowledging the existence and supporting the multi-graded teaching in various environment and contexts have been required to adapt (Taole & Mncube, 2012). The practicum experiences by the applicants should be enriched in order to support the development of the students (Seban, 2015). Teachers should also be supported by appropriate knowledge about practices of multi-graded contexts and are required to collaborate to reflect and develop their practices (Makoelle, 2014).

5. Conclusions

To conclude, in order to overwhelm the difficulties faced by the teachers and learners, such kind of teachers in multi-graded atmosphere should have various activities to do in order to maintain suitable teaching and learning conditions. The conclusions are as follows:

- 1. An arrangement of the classroom should be made according to combination of each grade. Each student's diversity, complexity, gender, age, family background, socio-economic background, language level, abilities, skills and special education should be well known by the multi-graded classroom teachers to produce better learning because a student may learn through peers, self-directed, cooperatively and/or various learning styles. Each variety should be an opportunity to promote learning. Additionally, personalized teaching and assessment strategies are essential for a multi-graded classroom teacher to personalize the teaching as well as the assessment methods because each student's needs, interests and styles differ and such teachers need to give response to the various backgrounds, learning styles and needs of each student.
- 2. Activity centers and workstations should be established to allow various activities to take place at the same time. The atmosphere and climate of the classroom should be arranged in order to ensure that students have a healthy, welcoming, inclusive and protective classroom where students of various backgrounds and grades meet their learning needs. Creativity of the teachers while managing such kind of classroom should be clear in arranging the grades and the groups as well as maintaining the individual work, which necessitate special attention to set up regular practices and promote new and advanced opportunities for each student.
- 3. Various teaching approaches and teaching methods should be applied to keep attention higher and increase learning level of the students. Curriculum, timetables and time should be flexible in case not to be able to implement

curriculum and timetables properly because the teacher may need to move from one group to another. Indeed, the teacher needs to balance the attention given to fast learners who may be responsible as student tutors since slow learners may need more attention. Teaching and learning materials should be innovatively developed and reproduced. Local resources may be used and/or made relevant to the local culture and local context in order to make teaching and learning closer to local conditions and available resources and/or materials. Additionally, students with higher grades may be asked to involve in helping while producing the authentic and local materials to make curriculum and timetable relevant to the local culture. Also, teachers need to work in collaboration with colleagues, students' parents, managers, as well as local authority to support mobility and to gain support from local authority for developing the limited teaching and learning materials, for improving the school, for gaining parents and for carrying out self-assessment of the students.

References

- Berry, C. (2006). *Multi-grade Teaching: A Discussion Document*. UK: Institute of Education, University of London.
- Beukes, C., G. (2006). Managing the effect of multi-grade teaching on learner performance in Namibia. Unpublished MEd Dissertation. University of Johannesburg, Johannesburg.
- Brown, B., A. (2010). Teachers' accounts of the usefulness of multigrade teaching in promoting sustainable human development related outcomes in rural South Africa. *Journal of Southern African Studies*, 36(1), 189-207. https://doi.org/10.1080/03057071003607428
- Brown, B., A. (2010). Multigrade teaching: A review of issues, trends and practices. Implications for teacher education in South Africa. East London, University of FortHare: CEPD.
- Dima, G. & Borcos, A. (2005). Training the multigrade school teacher as an effective classroom manager: Issues to consider in professional development. Paper presented at Lifelong e-learning for multigrade school teachers- Proceedings of the First Workshop of the Network of Multigrade Education, Helsinki, Finland. Retrieved from https://www.ea.gr/publications/pdf/helsinki proceedings nemed.pdf
- Fyfe, D. (2001). Managing multi-graded classes. Lessons developed in Free State South Africa. Free State Department of Education Canada South Africa Education Management Program. McGill University.
- Hargreaves, E. (2000). *Multi-grade teaching: one response to Jomtien*. London: University of London EID Group Institute of Education.
- Hill, L. (2000). Personal development Strand. Module MG.2 Managing the multigrade classroom. Retrieved from http://www.education.gov.pg/TISER/documents/pastep/pd-mt-2-managing-multigrade-classroom-student.pdf
- Hilberg, R., S., Chang, J., M., & Epaloose, G. (2003). Designing effective activity centers for diverse learners: A guide for teachers at all grade levels and for all subject areas. Center for

- Research on Education, Diversity and Excellence, Retrieved from http://manoa.hawaii.edu/coe/crede/wp-content/uploads/Hilberg et al 20031.pdf
- Jordaan, V., A. (2006). Facilitators course on multi-grade teaching. Facilitators guide with resources. Bloemfontein: Free State Department of Education.
- Joubert, J. (2010, June). Multigrade education in Africa and the centre for multigrade education. Newsletter: Bi-annual newsletter in English, French and Portuguese. Retrieved from http://unesdoc.unesco.org/images/0023/002313/231308e.pdf
- Joyce, T., M. (2014). Against all odds: How do primary teachers navigate in multi-grade teaching contexts? Journal of Human Ecology, 48(1), 153-159. https://doi.org/10.1080/09709274.2014.11906784
- Juvane, V. (2005). Redefining the role of multi-grade teaching. Policy lessons, options and priorities. Paper presented at Ministerial Seminar on Education for Rural people in Africa, Ethiopia, 7-9 September.
- Little, A. (1995). Multi-grade teaching: A review of research and practice. *Education Research Paper*, (12)63.
- Little, A., W. (2004). Learning and teaching in multi-grade settings. Paper prepared for the UNESCO 2005 EFA monitoring report.
- Little, A., W., Pridmore, P., Bajracharya, H., & Vithanaphathivana, M. (2007). Learning and teaching in multi-grade settings. A final report to DFID.
- Makoelle, T., M. (2014). Exploring effective teaching practices for inclusion: A case of a South African secondary school. *International Journal of Educational Sciences*, 7(1), 183-192. https://doi.org/10.1080/09751122.2014.11890181
- Makoelle, T., M. & Malindi, M., J. (2014). Multi-grade teaching and inclusion: Selected cases in the free state province of South Africa. *International Journal of Educational Sciences*, 7(1), 77-86. https://doi.org/10.1080/09751122.2014.11890171
- McEwan, P., J. (2008). Evaluating multigrade school reform in Latin America. *Comparative Education*, 44(4), 465-483. https://doi.org/10.1080/03050060802481504
- Mercier, E., M., Higgins, S., E., & Joyce-Gibbons, A. (2016). The effects of room design on computer-supported collaborative learning in a multi-touch classroom. *Interactive Learning Environments*, 24(3), 504-522. doi:10.1080/10494820.2014.881392
- Ministry of Basic and Secondary Education in Collaboration with the Learning Initiatives for Rural Education. (2008). The Gambia's Training Manual on Multi-Grade Teaching. Learning Initiatives for Rural Education, (2). Retrieved from https://scholarworks.umass.edu/cie-lire/2
- Mulryan-Kyne, C. (2007). The preparation of the teachers for multigrade teaching. *Teaching and Teacher Education*, (23), 501-514.
- Pancoe, M. (2006). *Multi-age learning and teaching. Early years curriculum materials*. The State of Queensland: Queensland Study Authority.
- Ramrathon, L. & Ngubane, T., I. (2013). Instructional leadership in multi-grade classrooms: What can mono-grade teachers learn from their resilience? *Education as Change: Issue sup1: School Instructional Leadership*, 17(1), S93-S105. https://doi.org/10.1080/16823206.2014.865995
- UNESCO IICBA Newsletter. (2010). Capacity development of rural teachers in Africa. International Institute for Capacity Building in Africa, June, 12(1). Retrieved from http://unesdoc.unesco.org/images/0023/002313/231308e.pdf

- Seban, D. (2015). Development of preservice identities: Learning from a multigrade classroom practicum context. *Journal of Education for Teaching: International research and pedagogy*, 41(1), 19-36. https://doi.org/10.1080/02607476.2014.992632
- Taole, M., J. (2014). Multi-grade teaching: A daunting challenge for rural teachers. Studies of tribes and tribals, 12(1), 95-102. https://doi.org/10.1080/0972639X.2014.11886690
- Taole, M. & Mncube, V., S. (2012). Multi-grade teaching and quality of education in South African rural schools: Educators' experiences. *Studies of Tribes and Tribals*, 10(2), 151-162. https://doi.org/10.1080/0972639X.2012.11886653
- Thalheimer, W. (2010). Will at work learning. K-12 Classrooms: Research review of multigrade, multiage, combination classrooms. November.
- Tustin D, Lightelm A, Martins J & Van Wyk, H. (2005). *Marketing Research in Practice*. Pretoria: University of South Africa.
- Wallace, J., C., McNish, H., & Allen, J. (eds.) (2001). A handbook for teachers of multi-grade classes. *UNESCO. Ag 2i communication*, 1.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the Journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (CC BY-NC-ND) (http://creativecommons.org/licenses/by-nc-nd/4.0/).