Chapter 2: Multi-class Teaching: Is it a Satisfactory Arrangement for Quality Rural Education?

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Introduction

This chapter focuses on multi-class teaching. Specifically, it highlights an important issue, namely, teacher professional preparation for multi-class teaching. The lack or absence of professional development of those teachers working in multi-class contexts appears to be an impediment to rural children's learning outcomes. A review of international literature is undertaken to better provide insights about interventions employed to strengthen multi-class teaching. These ideas could then be taken on board by developing countries, such as Fiji and other Pacific Island states, as a way forward in providing quality learning and teaching in situations with multi-class arrangements. This chapter concludes with some suggestions for stakeholders to consider, especially the principal stakeholder on the issue of multi-class teaching and how educational services of the best quality can be provided to children in such contexts.

Literature

Multi-class teaching refers to the teaching of two or more classes in one classroom by one teacher. It is also referred to as combination classes, split class teaching, multi-level teaching, or multi-grade teaching (Collingwood, 1991; Quist, 2005). Broadly speaking, the notion that every class is a multi-class is true. Therefore, a straight class is also a multi-class because children of different ages, interests, needs and abilities are found in straight classes too. Teachers then have to plan and conduct teaching and learning so that they cater for all children. However, in a multi-class situation the variations in terms of children's abilities and age are far much greater than in a straight class situation and this makes the

Multi-class teaching varies from context to context. Cornish (2006) cautions that there are contextual differences to multi-class teaching and knowing the contextual realities is valuable in having better understanding about multi-class teaching situations. In this regard, a study of multi-class situation in one context cannot be generalized to a multi-class situation in other contexts unless the contextual differences are at a minimum level. For example, multi-class situations in Fiji could differ markedly from those in Mexico, Bhutan or the African countries. In light of this view, most examples cited in this paper on multi-class teaching are drawn from the Fiji case.

Schools with multi-class teaching are found not only in rural parts the Pacific Island states but also in many different countries world over. For example,

- Finland: where 70% of all primary pupils are enrolled in schools with fewer than three teachers
- Portugal: where 80% of pupils attend schools with no more than two classrooms
- The Philippines: Where 8% of schools are multi-grade
- Mexico: where 22 % of primary schools have only one teacher
- India: where 77% of primary schools follow multi-grade system
- Ireland: where 42% of schools have two or more grade levels and 16% have three or more in a class (Quist, 2005: 4)

The only statistics available for multi-class teaching for the Pacific Island states dates back to the 1990s and multi-class teaching involved:

- 25 % of primary schools in the Solomon Islands
- 60 % of primary teachers, 50 % of children in Kiribati
- 8 out of 9 primary schools in Tuvalu
- 60% of teachers, involving 67 out of the 74 primary schools in the Marshall Islands
- 50 % of primary schools in the Cook Islands
- 10 % of teachers, 8 % of children in Western Samoa
- 28 % of primary school children in Vanuatu (Collingwood, 1991: 12)

Like the statistics for the Pacific Island states, the latest statistics available for multi-class in Fiji is for the early 1990s. The statistics show that 50 per cent of all primary schools; 25 per cent of teachers and 28 per cent of the nation's children were involved in multi-class teaching (Collingwood, 1991, p. 12). Even though, the statistics provided is quite old it gives some indication about multi-class teaching for some of the Pacific Island states, including Fiji. The statistics shows a high prevalence of multi-class teaching in almost all the countries in the Pacific region. A large number of teachers and children are involved in this kind of teaching arrangement.

As mentioned earlier, multi-class teaching arrangements are common in rural

(Collingwood, 1991; Hargreaves et. al., 2001, Lingam, 2007). In most cases, infrastructure and other essential services are poor in rural areas which further adversely impact children's education (Menon & Rao, 2006). In what follows are illustrations drawn from the Fiji case of the kind of school setting that exists where multi-class teaching is the norm:

The school can be reached by traveling a dusty gravel road. When the school officially opened its doors, the number of children enrolled was 44, 30 boys and 14 girls. These children were taught in a one-room building made of tin and timber. The school is a small one with four teachers, including the head teacher and 60 children, who were taught in four groups as follows: classes 1 and 2; classes 3 and 4; classes 5 and 6; and classes 7 and 8.

The school was established in 1936 and is controlled by a committee of local people. The school is situated beside a small hill. It is located about 17 kilometers from the nearest town. The 85 children who attend the school are from the nearby settlements. The people in the area are subsistence farmers and causal labourers who work on the copra farms. The children are mostly from families with low incomes. This is a four-teacher school covering classes 1 to 8. The current teachers had no previous experience in handling multi-class when they joined the staff.

The school was built in 1968. It is located about 20 kilometers from the nearest town. A four wheel drive vehicle is needed to travel about 13 kilometers from the main highway over the gravel road to the school. Most of the time one will experience noise and dust from the logging trucks. The highest recorded roll was 73 in 1983. Now, about 48 students in classes 1 to 6 are taught by three teachers, including the head teacher.

In the case of Fiji, there are about 560 primary schools which are classified as rural and of these 38 per cent are in very remote locations (Learning Together, 2000). Generally, most of the rural schools and in particular remote schools are small in size and have multi-class teaching arrangements. It appears that the present statistics for schools with multi-class teaching in Fiji has increased due to the establishment of new schools in rural areas. In addition, the migration of people from rural to urban areas may have caused some schools even with straight classes to switch to multi-class teaching arrangements (Lingam, 2011). The recent Fiji Education Commission 2000 report indicates that many indigenous Fijian children attend schools organized with multi-class teaching (Learning Together, 2000). From the general economy of scale perspective, small schools, that is those with small student population and with two to four teachers, are not viable. It costs more for the government to pay teachers' salaries and for the school governing body to keep the school running. In the case of Fiji, only two primary schools are owned by the government and the rest are owned and run by non-government organizations, such as social and religious organizations. When compared with large schools which are found in urban areas, the per capital notion of economy of scale should not be considered in the provision of educational services of any kind. Therefore, small schools are worth their existence in terms of providing children with education irrespective of their location and this justifies the existence of small rural schools with multi-class teaching arrangements. These small schools with multi-class teaching arrangements are somewhat similar to those pioneering one-teacher country schools: The Schools Everyone Loves (Low, 1979), and Reincarnation of the One Room School-house (Huber, 1975). Because of various reforms and innovations in education over the years, the work of teachers in the contemporary small schools have increased considerably than those one-teacher country schools when education was quite simple.

According to researchers, observers of education and scholars, multi-class is a difficult situation to teach especially when teachers are posted to these schools despite their having had no professional preparation for this kind of an teaching arrangement (Ali, 2004; Hargreaves et. al., 2001; Lingam, 2007; Mulcahy, 1993; Tuimavana, 2010). The recent Fiji Education Commission 2000 has this to say:

Many submissions to the Commission identified dual grade and multi-grade classes as a key obstacle to improving the quality of teaching and learning in primary schools (Learning Together, 2000, p. 83).

Added to this, schools with multi-class teaching are located in remote areas and teachers are isolated and have limited access and opportunities for professional development. This affects their professional practice as highlighted by Menon and Rao (2004: 51):

> They are isolated, poorly educated and have less access to improve their skills through new technologies. Due to their lack of access they are also less likely to be monitored and supported...working in an uninspiring environment where the sense of competence and self worth is low.

Some studies conducted in the new millennium in Fiji show that the quality of education for rural children is poor (Bacchus, 2000; Lingam, 2004; Narsey, 2004; Tuimavana, 2010). Teacher performance could be a contributing factor. Apart from the ministries of education, the overarching goal for parents is the quality education for their children. Similarly, various international organizations such as UNESCO and UNDP have been emphasising for decades on the need to provide quality education to all children irrespective of where they live. Unfortunately, the ground realities of the small island states of the Pacific, including Fiji pose considerable challenge to teachers in rural schools in achieving better learning outcomes of the children they teach.

To enhance children's education and for the achievement of Millennium Development Goals (MDG), Education For All (EFA) and other new initiatives, multi-class contexts need more attention from all stakeholders, namely, the education ministries for some constructive intervention strategy to boost teacher professional practice. Since teachers are the critical input to education, preservice preparation and later adequate professional support to rural teachers should deserve a high priority in the provision of quality primary education

Pedagogical Practices

Unlike in straight class teaching, teachers in schools with multi-class teaching arrangements need to be more creative in their pedagogical practices in order to enhance meaningful learning in the children. The implementation of suitable pedagogical techniques such as individualized learning programmes, peer tutoring, independent study and small group teaching will help children find learning meaningful and in turn they will profit from schooling. These methods and approaches of teaching can also be successfully applied in straight class teaching situation, while the converse can pose considerable difficulties to children in their learning. Generally, a socially constructivist approach rather than a transmissive approach of teaching and learning is recommended for multi-class (Cornish, 2006; Lingam, 2007; Quist, 2005). Little (2001, p. 477) suggests that:

> For children to learn effectively in multi-[class] environment, teachers need to be well-trained and supported, well-resourced and hold positive attitudes to multi-[class] teaching.

Little's suggestion is worth considering if schools with multi-class are to be seen as having the potential in meeting the educational needs of rural children.

In a research conducted by Lingam (2007) in Fiji using a qualitative case study research design, the teachers of the case study school reported that they did not receive any form of professional preparation for multi-class teaching in their pre-service training programme. Neither did they receive any form of in-service training in multi-class teaching. In addition, teachers in the study indicated that teaching was carried out in accordance with the prescription supplied by the Curriculum Advisory Section of the Ministry of Education which is age-graded. Similar findings were reported by Hargreaves and her colleagues (2001) in their study which was conducted in Peru, Sri Lanka and Vietnam. The single-grade type organization of the curriculum is appropriate only for straight class teaching. Hence, the teaching in multi-class was carried out like straight class teaching. There is no guidance in the National Curricula and Teachers' Guides that provides support for multi-class teaching or indicates how the curriculum materials and subject syllabuses might be adapted. Referring to multi-class teaching in Mongolia, Yembu (2006,, p. 123) highlights a similar scenario:

> Although we have plenty of experience in conducting [multi-class] teaching, there hasn't been yet any national policy, teachers manual, textbooks particularly designed for [multi-class] teaching or [multi-class] curriculum and there is no organization or person in charge of the matter.

Likewise, Mulcahy (1993) expressed similar concerns with the multi-class teaching situations in Newfoundland and Labrador. A similar view was expressed by Quist (2005) with reference to the African countries, such as Gambia, Kenya, Lesotho, Ethiopia, Nigeria, Zambia, and Uganda. This suggests that the employing authorities of teachers continue to pay scant attention to teacher quality in rural schools. If teachers are not professionally prepared to teach in

1989). This is because the use of any teaching approach would wholly depend on the quality of teachers appointed to teach in multi-class situations. The competence of teachers in turn depends on the quality of their professional preparation. Many empirical studies have shown that teachers do not have the necessary skills and knowledge to undertake teaching in multi-class situations (Ali, 2008; Cornish, 2006; Lingam, 2007; Little, 2001; Quist, 2005). Not only theoretical but also practical preparation for multi-class teaching will enable preservice teachers to use pedagogically sound practices to enhance children's school work. Theoretical preparation could encapsulate areas, such as organizing the classroom environment, teaching with small groups, peer teaching, assessment and evaluation, instructional resources and creating stand-by activities and using community support (Collingwood, 1991; Quist, 2005). Teachers posted to such schools will then have a range of pedagogically sound practices to effectively carry out the demands of work with creativity and in professionally stimulating and satisfying ways. The findings of a study conducted by Lingam (2007) in the Fiji context shows that most of teachers lack professional competence to undertake multi-class teaching as their training programme did not include any component on multi-class teaching. Quist (2005) also highlighted that most current teacher training programs both pre-service and in-service only cater for straight class teaching. Teachers need guidance and help in order to feel confident and then effectively teach more than one class in a classroom. The lack of pre-service training of teachers in multi-class teaching is a major challenge in providing children with a good quality education. It is therefore important that some modules on multi-class teaching are incorporated into the pre-service teacher education programmes and ongoing development of teachers for multiclass teaching are given due attention by the relevant authorities.

Snapshots of Initiatives to Strengthen Multi-class Teaching

The University of New England (UNE) and the Government of Bhutan have successfully worked in partnership whereby Bhutanese teachers go to UNE for training in multi-class teaching (Ninnes, 2006). This arose after a major shift in emphasis from teacher centred methods of teaching to being student centred and the introduction of the so called 'New Approach to Primary Education' (NAPE) (Laird & Maxwell, 2000). It appears that prior to NAPE teachers employed teacher centred pedagogical practices to carry out multi-class teaching. The teacher-centred models of teaching are long outdated and for multi-class teaching this method is unsuitable for improving children's learning outcomes. Initiatives like the NAPE, is important in meeting the professional development needs of those teachers teaching in multi-class situations. Not only when changes occur in the school curriculum but also new research on teaching and learning will require ongoing professional development of teachers to cope with new demands of work placed upon them (OECD, 2006). Ongoing investment in the professional development of teachers in handling multi-class will help rural children to achieve the best possible learning outcomes like their urban counterparts. Despite the contextual differences between Australia and Bhutan, the two countries still have a lot in common with regards to multi-class teaching and as such the training may have equipped these teachers with relevant knowledge and skills to cope with multi-class teaching in Bhutan. As pointed out by Ninner professional development programme has been promising as an exa teacher professional development can lead to improvements it teaching practices.

In the Free State Province of South Africa, the Department of E an agency from Germany collaborated to provide professional de multi-class teachers (Soci, 2006). Similarly, in Sub-Saharan Africa of the World Bank on the Teacher Effectiveness Support Pro strengthened multi-class teaching in the area (Higgins, 2006). Forward (1988) designed a handbook on multi-grade teaching to 1 and head teachers in their work in small schools. The book included as classroom layouts, ways of organizing pupils to maximize their le support to the teachers will help in the effective delivery of educati to the children in multi-class situations. Likewise, in Finland which per cent of the primary schools with multi-class teaching arrangeme class component is included in the teacher education programme (Ka Such professional development opportunities afforded to multi-class step in the right direction. The programmes will help these tea appreciate and effectively work in schools with multi-cla arrangements. Even such programmes can also help these teachers to with reality, trends and developments and to be up-to-date with literature on multi-class teaching.

With reference to the Pacific Island countries, a UNESCO I Multi-class Teaching in Primary Schools was prepared (Collingwood book was a way of helping multi-class teachers cope with multi-c and thereby maximize the impact of teaching on the children of P states. This handbook was a much needed resource for teachers in the

Teachers posted to isolated schools are too inaccessible to the Inspectorate more than very infrequently... These teach posted to multi-class or composite schools despite their hapre-service preparation and supported by an inspectorate whas had little specialized preparation. They have had at the virtually no means for professional improvement; the inspregarded with mistrust; their colleagues, including the hewere scarcely any better off than they; and no training makind existed. The present project attempts to improve the sith three respects and it is for redress of the last, training in the present handbook was written, trialed and published (C 1991:5).

The book include chapters on multi-class teaching, year group or organizing classrooms, planning work, setting up routines, teaching peer teaching and making use of outside help. In addition, it includes on creating lively learning activities and describes 'stand-by' activitie in a study conducted by a team of researchers in Fiji, found that the was too general and not quite applicable to Fiji classroom situati 1996). This is true because multi-class teaching varies from contex

and the handbook was not tailor made to suit Fiji's unique situation. Another interesting finding was that the handbook was still not available in the case study schools and even the head teachers showed only a hazy recollection of the existence of the publication (Singh, 1996). Provision of handbooks alone is not sufficient to equip teachers for multi-class teaching.

Initiatives in Fiji

Unfortunately, for many decades there has been an absence of any kind of development on multi-class teaching in areas such as pre-service and in-service teacher education programmes. Even no large scale studies were conducted in the area of multi-class teaching to inform policy and practice. It was in 2004 when a component on multi-class teaching was incorporated in the pre-service teacher education programme of the government-owned primary teachers college, namely, Lautoka Teachers College. This college has now amalgamated with other tertiary institutions to form the Fiji National University. The course entitled *Program Planning in the Multi-grade Classroom* has the following aim:

Planning, implementing and evaluating the effectiveness of programs, form the core of teachers' work in the classroom, and builds upon and brings together the teachers' skills as facilitators of learning with their skills as classroom managers. All of these skills and the theoretical understandings upon which they are built are acquired through practice and reflection. Being able to plan programs for more than one year level in a single classroom reflects the reality of primary education in Fiji, particularly in rural and isolated areas where the majority of schools is small and contains multi-level classrooms. This course is therefore directly linked to a six-week-long practicum in a small school where the first two-week session is used for familiarisation and the identification of programs across all areas of the primary curriculum which the student teacher will teach. Following a two-week preparation period in the college, the second, four-week, session is used to implement and evaluate those programs (LTCUP, 2004. P. 4).

Some of the topics covered in the course include planning classroom work, organizing the classroom, developing and establishing routine teaching with groups, and peer teaching (LTCUP, 2004). Such a course was long overdue. It is envisaged that this course will help equip teachers with suitable pedagogies for learning and teaching to ensure the best possible educational outcomes for rural children. Since the course is part of the pre-service teacher education programme all students are provided with the theoretical knowledge and hands-on-experience in multi-class teaching. This is a milestone achievement for Fiji. Apart from preservice training programme, the Ministry of Education might consider conducting some workshops for the ongoing development of teachers on multi-class teaching.

Conclusion

The multi-class teaching arrangement is certain to remain in Fiji and in other parts of the Pacific region and the world for the foreseeable future as part of the primary schooling structure. There is no other better alternative method than the existing arrangement to cater for children's education in small rural schools. The literature on the multi-class teaching arrangement illustrates that to improve the quality of education in schools organized in this way, pre-service teacher preparation and ongoing teacher capacity building is the long term solution. While the focus of this paper has been mostly on Fiji, other countries in the Pacific region too need to take some constructive steps to ensure future teachers are well prepared to work in schools with multi-class situations. Only then will children in such schools receive the quality of education that they rightly deserve, like their urban counterparts. Initiatives, like the one in Fiji, are a step in the right direction and could be followed by other countries in the region as a starting point towards the provision of quality education for rural children.

References

- Ali, W. (2004). Challenges in multi-class teaching: A case study in a Fiji school. Unpublished Master of Education Dissertation, University of the South Pacific, Suva, Fiji.
- Collingwood, I. (1991). Multi-class teaching in primary schools. A handbook for teachers in the Pacific. Apia, Western Samoa: UNESCO Office.
- Cornish, L. (2006). What is multi-grade teaching? In L. Cornish (ed.). Reaching EFA through multi-grade teaching: Issues, contexts and practices (pp. 9-26). Armidale, Australia: Kardoorair Press.
- Forward, B. (1988). *Teaching in the smaller school*. London: Cambridge University Press.
- Hargreaves, E., Montero, C., chau, N., Sibli, M. & Thanh, T. (2001). Multi-grade teaching in Peru, Sri Lanka, and Vietnam: An overview. *International Journal of Educational Development*, 21(1), 499-520.
- Higgins, C. (2006). Multi-grade issues in Sub-Saharan Africa. In L. Cornish (ed.), Reaching EFA through multi-grade teaching: Issues, contexts and practices (pp.181-196). Armidale: Kardoorair Press.
- Huber, J. D. (1975). Reincarnation of the one Room schoolhouse. *The Clearing House*, 49(3), Washington DC.
- Kalaoja, E. (2006). Change and innovation in multi-grade teaching in Finland. In L. Cornish (ed.), Reaching EFA through multi-grade teaching: Issues, contexts and practices (pp.215-228). Armidale: Kardoorair Press.
- Laird, D. J. & Maxwell, T. W. (2000). Educational change in Bhutan: The UNE partnership. *New Horizons in Education*, 102, 84-95.
- Learning Together Directions for Education in the Fiji Islands. Report of the Fiji Islands Education Commission Panel (2000) Suva, Fiji: Government Printer.
- Lingam, G. I. (2007). Pedagogical practices: the case of multi-class teaching in Fiji primary school. *Educational Research and Review*, 2(7), 186-192.

- Lingam, G. I. (2012). The University of the South Pacific's Bachelor in Education Program: Meeting the challenges in rural teacher professional development in Fiji and the Pacific. In U. Baba-Nabobo, S. Naisilisili; S. Bogitini: T. L. Baba & G. I. Lingam (Eds.). Rural education and remote schools in Udu, Fiji (pp.208-228). Suva, Fiji: Faculty of Arts, Law and Education.
- Little, A. (2001). Multi-grade teaching: towards an international research and policy agenda. *International Journal of Educational Development*, 21, 481-497.
- Low, J. (1979). The schools everyone loves. NRTA Journal XXX, San Diego.
- LTCUP. (2004). Lautoka Teachers College Upgrade Project: Diploma of Primary Education. Lautoka, Fiji: Lautoka Teachers College.
- Menon, L. & Rao, P. (2006). Multi-grade for remote and disadvantaged schools. In L. Cornish (ed.), *Reaching EFA through multi-grade teaching: Issues, contexts and practices* (pp.165-180) Armidale: Kardoorair Press.
- Mulcahy, D. (1993). Developing a distinctive approach for multi-grade classrooms: Some preliminary considerations. *Education Canada*, 33(1), 24-29.
- Narsey, W. (2004). Academic outcomes and resources for basic education in Fiji: Disparities by region, gender and economic background. Suva, Fiji: Institute of Education, University of the South Pacific.
- Ninnes P (2006). The Bhutan Multi-grade Attachment Program. In L. Cornish (ed.), Reaching EFA through multi-grade teaching: Issues, contexts and practices (pp.125-136). Armidale: Kardoorair Press.
- Organisation for Economic Co-operation and Development[OECD] (2006). Teachers matter: attracting, developing and retaining effective teachers. Paris: OECD.
- Quist, D. (2005). Resource materials for multi-grade teaching. London: Commonwealth Secretariat.
- Singh, G. (1996). Report on composite class teaching: An action research project at Lautoka Teachers College 1994-1995. Suva, Fiji: Institute of Education, University of the South Pacific.
- Soci, T. (2004). Multi-grade teaching: Experiences in the Free State Province of South Africa. In L. Cornish (ed.), Reaching EFA through multi-grade teaching: Issues, contexts and practices (pp.157-164). Armidale: Kardoorair Press.
- Tuimavana, R. W. R. (2010). Developing and retaining quality teachers in rural Fiji primary schools. Unpublished master's thesis. The University of the South Pacific, Suva, Fiji.
- UNESCO (1989). Planning for the recruitment and utilization of teachers: Module 5. Paris: International Institute of Education Planning.
- Veenman, S. (1995). Cognitive and noncognitive effects of multi-grade and multi-age classes: A best-evidence synthesis. *Review of Educational Research*, 65(4), 319-331.
- Yembuu, B. (2006). Current situation and future perspective of multi-grade teaching in Mongolia. In L. Cornish (ed.), Reaching EFA through multi-grade teaching: Issues, contexts and practices (pp.93-102). Armidale: