Supporting Para-Teachers by Regularizing and Strengthening Planning, Enactment and Reflection of Daily Lessons

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Abstract: This study describes professional development of para-teachers in an Indian educational NGO, aimed at supporting them in adopting learner centered methods. Para-teacher learning was facilitated by introducing a daily routine of lesson planning, lesson enactment and lesson reflection. These were supported through workshops, microteaching, coaching activities. Interviews and lesson plan reviews reflected how para- teachers perceived their first professional development experience, what lesson planning skills they achieved and what enactment changes they perceived. The main conclusion of the study was that without any prior experience in lesson planning, through contextually suitable professional support, para-teachers tremendously gained knowledge and skills for well structured learner-centered oriented lesson planning. As compared to the pre professional development time, when enactment was ill-structured and rote-based, a shift towards better-structured and learner-centered orientation was apparent.

Introduction

In developing countries, NGOs play important roles in delivering education, especially to disadvantaged populations. The UN millennium development goal of 'education for all' commits governments to collaborate with NGOs in developing and disseminating educational innovations. NGOs are under pressure to step out of the charity mode, and professionalize the way they function, especially with the training of their para-educators. Studies acknowledge para-educators are valuable for their commitment, insider insights and ability to relate to the unique needs of children in difficult circumstances ((Desai, 2003; Pandey, 2006). However, concerns exist about the lack of basic education and professional teacher training of the para-educators, which dilutes the quality of teaching learning. Increasingly, calls are being made for the professional development of para-educators in India (Jagannathan, 2000) and elsewhere. Yet, the research-base for designing professional development for para-educators is limited. This research was undertaken to explore if and to what extent para-teachers in an Indian NGO learned how to prepare learner-centered lessons through focused professional development activities.

Setting

This study was based in an NGO called Maitri (pseudonym), in a city in western India with a population of about 4 million people. Maitri offers a variety of educational programs. The one described in this study provides educational support to slum children through learning centers within their residential communities.

Each center has a para-teacher recruited from the local area on a small honorarium, with qualifications ranging from 12th grade to bachelor's degree. Para-teachers do not have professional pre-service teacher training. 30- 40 centers are evenly distributed over 3 clusters, each run by a senior teacher called the cluster head. Since 2000, the centers have been targeting public school children up to age 14 whose attainment levels in reading and basic math are very low. In 2005, the management decided that the centers would also teach advanced subject matter up to grade 7 using learner-centered methods. A central curriculum design team created materials for all centers. The management felt the need to provide professional support to assist the changes in teaching and learning. The main contextual factors that influenced the nature and design of professional support were, para-teachers' lack of (1) prior relevant teaching experience; (2) lesson-planning skills for coherent curriculum enactment; (3) basic teaching skills to make learner-centered teaching well structured and coherent and (4) familiarity with learner-centered approaches. Key environmental factors influencing the design of the support included:

- Large and highly heterogeneous classes in terms of age and attainment levels;
- Ill-resourced environments: Para-teachers got no time to familiarize themselves with the material that they had to teach. Because of additional responsibilities, teaching took place without any prior preparation. Cluster heads' roles predominantly involved providing administrative support.

Within this context, a main objective was set to enhance the amount and quality of ongoing support, to enable para-teachers develop their repertoire of learner-centered teaching and classroom management strategies. A conceptual model was developed to shape the professional development program.

Conceptual model

Designing, enacting and reflecting upon the self-designed lessons are considered practical and viable routes to para-teacher learning; especially when embedded into the daily work of para-teachers. This perspective embraces an experiential and situated understanding of learning, in which lesson-planning and enactment serve as actual contexts of teacher work (Ball & Cohen, 1999; Davis & Krajcik, 2005). Lesson-planning is viewed essentially as a process of evaluating, adapting and enacting curriculum materials in light of teachers' own unique needs and contexts (Forbes & Davis, 2008; Squire, Makinster, Barnet, Luehmann, & Barab, 2003), and based on their current competencies. Such learning by design promotes and focuses learning, providing opportunities of application as well as allowing skill and concept learning (Kolodner, 2003). Enactment is not just any activity undertaken by the teachers, but the deliberate putting into action of a new idea or practice (Clarke & Hollingsworth, 2002). In a similar vein, insight is also generated through deliberate reflection on concrete experiences (Kolb, 1984). In teacher learning, reflection is referred to as the critical thoughts of teachers about their beliefs and knowledge of teaching and about the teaching practices and effects elicited by those beliefs and knowledge (Stronge, 2007; Sung, Chang, Yu, & Chang, 2009). While acts of planning, enacting and

reflecting have the potential to serve as learning opportunities, they are rarely learning activities on their own. Rather, supportive strategies must be employed to bring out the learning from these activities. Figure 1 shows how these ideas have been brought together in a conceptual model for the on-going professional development of para-teachers.
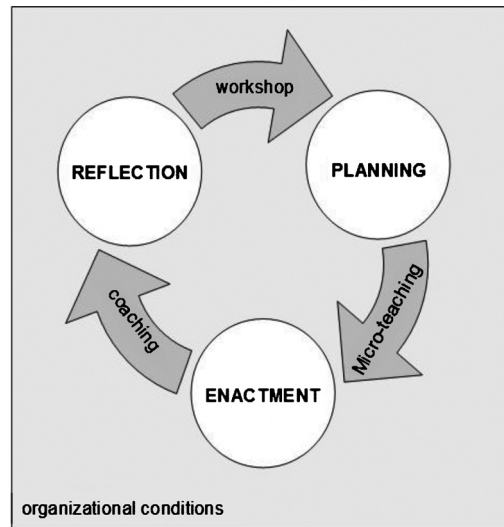

Figure1: *Plan-enact-reflect activities and strategies to support them*

There are three supportive strategies in the model: workshops, micro-teaching and coaching aimed to facilitate the cyclic activity. This is important because para-teachers are not used to systematic planning and reflecting, and lack skills in structuring lessons and learner-centered teaching. Workshops are used to strengthen lesson-planning of para-teachers, and are a well-known professional development approach because they afford the opportunity to bring experiences from classrooms and explore new ideas (Putnam & Borko, 2000). This model adopts a combined approach which integrates learning opportunities within the daily work routines with external opportunities like workshops (Bredeson, 2000). Micro-teaching experiences support enactment, serving as controlled conditions to focus on specific teaching behaviors (Allen & Eve, 1968). Coaching is viewed as a supportive strategy for reflection activities. Both micro-teaching and coaching (by peers and supervisors) during reflection are used as opportunities to learn about new strategies as well as engage in intense deliberations (Darling-Hammond & McLaughlin, 1996; Lieberman, 1996). In addition to the supportive strategies, the model suggests that organizational structures, which influence working conditions, must be examined and, if necessary, redesigned (Darling-Hammond & McLaughlin, 1996; Fullan, 1991; Fullan & Pomfret, 1977; Silins & Mulfort, 2002) to allow core activities and supportive strategies to flourish. The model thus incorporates the two aspects considered critical to professional development: developing learning processes of teachers; and institutional support (Gallucci, 2008; Penuel, Fishman, Yamaguchi, & Gallagher, 2007).

Professional development program

Based on the model presented in Figure 1, a professional development program was developed. The program was introduced during the summer holidays when mainstream schools were closed. The community centers organized art classes for the children in the slum communities. Para-teachers taught only one class a day, so they could get more time to prepare for everyday lessons. This allowed them to experience lesson-planning and reflection work in a relatively low-stress environment. Para-teachers were provided with art teaching material for 30 days by the NGO, by which children could develop skills in 'art appreciation' and 'art creation'. Para-teachers and their students were unfamiliar with such activity based art teaching and learning.

Before the commencement of the art classes, an orientation workshop was organized. Thereafter, para-teachers reflected daily on their work and planned for the next day. Additionally, time was made for micro-teaching activities to practice the next day's lessons. Cluster heads co-facilitated these centralized activities. A reflection activity was also scheduled every Saturday, which was facilitated by each cluster head in their respective clusters.

Organizational changes conducive to these learning activities were introduced. Tasks were reorganized in order to integrate new planning and reflection routines in their timetables. Supervisors also learned to redefine their roles: redesigning their work routines, developing the lesson-planning tools, workshops and coaching. Table 1 provides an overview of the professional development program elements.

Table1: *Professional development program elements*

Core Activities	Material /Content
Daily Lesson-planning	A lesson plan template with elements of systematic lesson-planning described in the form of a question
Daily Enactment of lesson plan	
Daily Reflection on lesson plan	A simple tool with the same elements of the lesson plan,
Weekly Reflection	Template for each individual to support reflection on enactment experiences over the week and plan for the following week Cluster level meeting facilitated by the cluster head
Supportive strategies	**Material /Content**
Monthly Workshop	Total of 6 sessions 1 group discussion on use of classroom norms as behavior management strategy 2 group work sessions : study, discuss and clarify how to lesson plan and reflect using templates
Daily Micro-teaching	Practicing enactment of lesson plan Peer feedback and sharing of ideas
Daily Coaching	Cluster heads during enactment Peers and cluster heads during reflection and lesson-planning

Para-teachers developed daily lesson plans using a template designed to help them 'think through' the different aspects. This involved planning activities through simple yet detailed questions, with the additional help of teacher guides that described learner-centered activities for different concepts. The questions were flexible so that participants could borrow ideas from the teacher guides as well as brainstorm on their own. Each question was aimed at helping them operationally plan out the essential elements of curriculum (cf. Klein, 1991; van den Akker, 2003). Table 2 displays the questions in the lesson-planning template.

Table 2: *Lesson-planning tool inspired by curriculum components*

No	Questions
1	What is the objective of the art activity I will be doing tomorrow?
2	How will I start the day in the class? Will I start with a fun activity, a game, a story or any other way? (how much time and what material do I need for this activity)
3	What type of norms are necessary to be followed by students during tomor-row's activity? How will I support them in deciding these? Will I scaffold by demonstrating a situation, giving examples, asking questions, or any other ideas?
4	What steps will I take when students will violate established conduct norms and it disrupts their work? What type of reinforcements can I use?
5	How will I link the previous day's work with the current day's work?
6	What type of instructions do I need to provide while introducing the activity so that the students clearly understand what they are required to do during the art activity? (How much time do I need to instruct all the groups?)
7	How many groups can I form for the activity and what will be those groups?
8	What criteria will I use to form the groups?
9	What are the detailed steps in the activity? (How much time will each group need to plan the activity and what material should I keep ready for it?)
10	Based on the recommendations provided in the material what are the things I have to keep in mind as well as avoid to facilitate the group process well?
11	How will I determine whether children completed the activity successfully or not?

Method

The main aim of the study was to understand if and how para-teachers were able to develop lesson-planning skills through the support provided, without prior knowledge of lesson-planning. Because perceived value influences adoption of new ideas and skills, this study also examined how teachers felt about the new ways they were teaching. Three research questions guided this study:

1. How did the para-teachers experience the professional development program?

2. What lesson-planning skills did the para-teachers acquire?

3. What are para-teacher perceptions about changes in their own classroom enactment?

Participants

Nine para-teachers, three from each of the clusters, were selected for the data collection, in consultation with the management team and the cluster heads.

Procedure

Lesson-planning skills were examined through document review of lesson plans and also through participant self-reporting on lesson-planning skills gained through interviews. Perceptions about classroom enactment were gained through in-depth interviews with cluster heads and participants. Table 3 reflects the data collection methods used for the different research questions.

Table 3: *Matching research questions with data collection methods*

Research question	Methods
How did the para-teachers experience the professional development interventions?	Participant Interviews
What lesson-planning skills did para-teachers acquire?	Document Reviews Participant Interviews
What are the perceptions about changes in classroom enactment?	Cluster head interviews Participant interviews

Analysis and Results

Participant interview data were analyzed first. Predefined themes based on the research questions were used to categorize the data. Thereafter, analysis involved looking for new themes and recurring patterns of meaning (Merriam, 1998). Document review of lesson plan was done quantitatively. From the 20 lesson plans created during the four weeks, three from each week were selected at random for a total of 12 lesson plans per person. Altogether 108 lesson plans were analyzed. Four parameters were developed to analyze the plans: completeness, accuracy, appropriateness and detail. Answers to each question in the planning tool were coded according to these parameters. A code "y" was allotted when the question fulfilled the parameter and "n" when it did not fulfill the parameter. Scores, based on percentages of "y" codes, were used to rank participant performance on each parameter and each question. Performance scores between 0 to 33 percent were considered low, 34 to 66 percent was considered moderate and scores above 66 percent were considered high. Table 4 provides the definitions of each parameter and codes given for two sample answers.

Table 4: *Example of document analysis of lesson plans*

Document analysis coding			Excerpt from completed lesson plan
Para-meters	Indicators	**Code given**	What type of norms are necessary to be followed by students during tomorrow's activity? How will I support them in deciding these? Will I demonstrate some useful behavior by demonstrating a situation, giving examples, asking questions, or any other ideas?
Complete-ness	Logical beginning and end to the answer; each question answered	y	Group wise norms : Group 1 : Share materials within the group; ask for material from my group mate and not snatch it from him/her ; not getting up and leaving the group in the middle of an activity;
Accuracy	Question understood correctly	y	Group 2: same as above, but also not distracting group 1 while they are working.
Approp-riateness	Not stringent and easily implementable by the children; Intended for making the activity productive and not aimless, 'for the sake of it'	y	Support in defining: To remind both groups about the norms, I will ask them to recollect these norms from yesterday's discussion before the group activity and agree with them that we will follow these norms.
Detail	Answer in detail , making each step possible transparent	y	I will talk to them about the advantages of following these norms from yesterday's example. For instance, point out that there are no quarrels in the class ; the everyone gets a chance to work, we finished the activity in time, etc.
Para-me-ters	**Indicators**	**Code given**	What steps will I take when students will violate established conduct norms and it disrupts their work? What type of positive and negative reinforcements can I use?
Complete-ness	Logical beginning and end to the answer; each question answered	n	Go out of the class
Accuracy	Question understood correctly	y	
Approp-riateness	Not stringent and easily implementable by the children; Intended for making the activity productive and not aimless, 'for the sake of it'	n	
Detail	Answer in detail , making each step possible transparent	N	

How did the para-teachers experience the professional development program?

The participants shared in-depth perceptions on core and supportive strategies, particularly (a) how they viewed the specific role of the different learning activities; and (b) what specific aspects they found difficult or inconvenient about each intervention and what aspects easy and beneficial.

Core activities

The participants commented on the newly-added activities of lesson-planning and daily reflection.

Daily Lesson-planning: All participants expressed more confidence and ease in teaching because of prior preparation through lesson-planning. They reported that lesson-planning was very useful as a preparatory activity stating different reasons for it,

"It became possible for me to become familiar with the materials as well as have a teaching plan based on them even though each day's activities and materials were completely new".

And,

"At the end of the planning, I could visualize two hours of teaching time and I had clarity about what to do in teaching as well as classroom management throughout the two hours of class work",

Almost all the participants explained that they referred to the lesson plans when they forgot something during enactment. Most participants had found some of the questions on determining norms difficult to think about. Five participants thought that writing was more difficult initially than just thinking and talking aboutideas.

Daily Reflection: A recurrent theme in the interviews was that daily reflection activities helped teachers gain a snapshot of the day and share feelings about the day's work. Participants reported different reasons that made the daily reflection activity useful. For instance, one participant said:

"New ideas got generated while reflecting and discussing everyday for addressing different aspects of the teaching process".

While another shared,

"It, made things easy, as the insights I gained were already ideas for the next day".

Only one participant thought,

"Sometimes those discussions go on and on; it's a waste of time".

Six participants stated that they found it easy to review their day's work in terms of satisfaction or dissatisfaction, but it was difficult to articulate why. Every participant felt it was easier to reflect jointly than individually. Most of the participants shared that lesson-planning and reflection felt difficult in the beginning, but with daily support by the cluster heads and peers and daily practice, it became easier.

Weekly Reflection: Participants from two clusters shared that the cluster heads facilitated discussions based on the weekly reflection tool contents, through which the participants were able to address concerns resulting from the past week's action or following week's planning. One of them said that the weekly reflection was useful as,

 "At the end of the week I took stock of my as well as my students' progress".

Another participant shared that,

"I could get to consolidate the daily planning and reflection of the whole week".

In one cluster, participants felt that the weekly activity in their cluster was just an activity of mechanically filling the tool, where no discussion was facilitated by the cluster head. Overall, participants felt they could be more independent at the later stages of planning and reflection; at the earlier stages they were much more dependent on the cluster heads and facilitator.

Supportive strategies

Participants also shared their experiences about the different supportive strategies employed to strengthen planning, enactment and reflection activities.

Workshops: All the participants judged that that the workshop was useful as an orientation process to understand what a practical activity looks like in reality. For instance, according to one participant,

"The demonstration activities gave a mental image about the practical way of teaching art".

Or, another expressed that,

"I got an idea how to use the teaching materials practically during an art activity".

A commonly expressed concern was that the practical demonstrations were easy to understand but it was difficult to relate to the ideas that were discussed in the group-discussion about tools and disciplining strategies. Participants also shared that they had started viewing art differently in terms of what is entailed as a subject as well as how it can be taught. As one of the participants shared,

"I realized that art involves creating and appreciating the things around us. This was the first time I saw what art is about and how it can be taught".

Micro-teaching: One of the predominant perceptions regarding micro-teaching experiences was that they themselves understood art differently because they had also been 'art students' during the micro-teaching activity. For instance one participant shared,

"I learnt by creating my own drawings during micro-teaching sessions that there is so much detail one can observe when one looks at nature around. When one learns to look minutely, one can imagine and create one's own scenery picture"

Another shared that by being the learner in the micro-teaching sessions over one month, she had started believing that she could also draw and be creative, and started viewing her peers differently in terms of their art skills. She also expressed that,

"I learnt art by doing it and slowly over time I could see that I had improved. Therefore I could also treat my students like that. I did not expect them to draw the best picture in the first instance, unlike how it was for us when we were students".

Another participant echoed a similar impression,

"I and all my peers have learnt by doing. We have learnt to draw and be creative by practicing it. This is how our students will learn as well".

Participants also explained that they found micro-teaching useful to share new ideas about enactment. Across different participants they provided examples of enactment ideas gained from micro-teaching sessions, for instance, finding effective ways of explaining to students how to enact activities, modifying specific activities for fast track students, or having a sufficient repertoire of questions that can be asked so that they could provide more children with the opportunity to participate in a discussion. Some participants felt that they learned just by watching the peers enact during practice sessions. For instance one participant said.

"When I saw in the practice session that my peer did not involve all the learners, I made a note that I should not do it, because the image stayed in my mind".

Many said micro-teaching was useful when they had not understood the activity well enough after reading the manual. Participants from two clusters shared that it was difficult in the first week because,

"I did not feel confident of demonstrating before others"

"Peers find faults for the sake of it"

"Peers purposely behaved like small children and misbehaved"

However they shared that this was solved soon as with practice their fear of presenting in front of others was diminished and with feedback from the cluster heads, peers slowly changed their attitude at the micro-teaching sessions.

Coaching: Participants shared that their cluster heads were present everyday to support reflection on their activities; and two cluster-heads also supported the weekly reflections. Participants from all the three clusters supported each other during reflection. In all the clusters, similar coaching support was also solicited during lesson-planning, according to the participants. They consistently found planning and reflection easier over time, on account of the daily support available for the heads and the peers. A comment, supported by many others,

"Often when I reflected on my class, I could not think of how I could solve a difficulty, but if the cluster head was present, she would identify a strategy that she had observed in my peer's class which would be helpful to me, and ask her to share it with me. So I got new ideas and we also learnt to bring out more examples from our own practice to help our peers because of the coach's facilitation".

What lesson-planning skills did the para-teachers acquire?

A review of the planned lessons together with interview data helped address this question. As indicated in Table 5, the mean scores from each cluster were quite high, with over 66 percent for completeness, accuracy and appropriateness of their lesson-plans. However, the mean score for detailing of the questions was much

lower. For detailing, two participants scored low, below 33 percent, and the rest achieved a moderate score.

This indicates that these participants paid greater attention to ensuring that they understood the questions correctly and came up with legitimate classroom teaching strategies for each question.

Table5: *Mean percentage scores of participants on quality parameters in lesson-planning*

Participant	Cluster Complete	Accurate		Appropriateness	Detailing
(pseudonyms)					
Meera	A	68%	68%	69%	51%
Harsha	A	75%	77%	76%	60%
Varuna	A	67%	75%	75%	32%
Sarojini	B	82%	85%	85%	55%
Avnita	B	76%	86%	86%	50%
Shubhlaxmi	B	76%	79%	79%	47%
Mital	C	86%	95%	93%	35%
Chanda	C	67%	75%	75%	32%
Sanjana	C	71%	95%	94%	51%
Mean score per parameter		74%	82%	81%	46%

Table 6 gives the mean scores for each question. Questions where participants had scored high, that is, above 66 percent, in order of ranking were:

Q2. Introductory activity

Q5. Linking the day's work with previous day

Q10. Strategies to steer the group process based on recommendations in the material

Q11. Concluding activity

Q6. Providing clear directions to the students when assigning a group activity

Q7. Formation of groups

Q1. Objective of the activity

The other questions ranked in order in the moderate category (scoring below 66 percent) were:

Q8.Criteria for determining sub groups

Q3.Defining norms

Q4.Reinforcing norms

Q9.Main steps of the activity

Table6: *Mean percentage score per question and per participant*

Question	Meera	Harsha	Varuna	Sarojini	Avnita	Shubh-laxmi	Mital	Chanda	Sanjana	mean
1	75	75	60	68	75	68	68	60	75	69
2	100	80	98	98	98	98	100	98	83	94
3	15	35	60	70	63	70	78	60	55	56
4	8	25	73	63	58	63	70	73	70	56
5	100	100	70	95	98	23	88	70	95	82
6	98	98	48	93	85	93	73	48	80	79
7	88	90	60	48	88	48	70	60	75	69
8	28	30	58	63	63	63	73	58	78	57
9	40	80	45	55	30	55	76	45	63	54
10	68	80	68	98	80	98	95	68	90	83
11	88	100	45	98	88	98	61	45	93	79
Part. Total score	64	72	62	77	75	70	77	62	78	

When lesson plan scores per week were compared, they reflected no substantial difference between week 1 and week 4 for any participant. All participants started with a high or moderate mean percentage score, and retained that over the four weeks.

Interview data showed that participants had acquired a systematic approach to planning lessons. A common response was.

"I have learnt to plan my lessons in a step by step manner".

Participants discussed that they began to pay attention to aspects like beginning the lesson, and the lesson objective. Some perceptions were,

"I pay attention to having a good introductory activity, because when the class begins in an enjoyable way, students become motivated and attentive".

"There was no objective for any of my class activities earlier but now I learnt to write down objective of each activity".

"I learnt that I have to determine whether the objective is achieved or not, instead of just leaving the activity open ended".

Most participants indicated that they could plan time better. One said,

"Planning helped me to allocate time for each step and therefore the overall time for the class".

Another commonly acknowledged learning was about planning activity steps and materials. Participants shared,

"Planning the learning activity helped in thinking step by step for the activity and how and when to use what material"

"I learnt how to plan for using the materials in a more organized manner based on the relevant stage in the activity and not randomly"

"It has helped me in making the activity simpler through examples and questions"

Participants also talked at length about grouping children and planning appropriate learning tasks for groups. For instance,

"During February and March (before the interventions), I took into consideration only 2-3children, e.g. which math sums I would give to std. 6th and 7th kids. But during art trunk, and by filling the planning, I learnt to plan for each and every child as well as the classroom on the whole, as I had divided the class in groups"

Participants thought aloud about how they now paid attention to forming classroom norms. Several said lesson-planning,

"Helped me in making norms and following the norms along with children"

But they also shared that they found it difficult to think of specific norms everyday or to find new ways of reinforcing them. Some of the participants admitted that they often skipped that question because they did not know how to address it.

What are para-teacher perceptions about changes in their own classroom enactment?

Data to answer this question was gathered mainly from cluster heads who, based on observations, shared their perceptions of enactment aspects that were satisfactorily achieved and those aspects which should be reinforced in subsequent versions of this program. The biggest change all three witnessed was that the para-teachers had ceased to follow a whole class teaching approach and worked with students in groups. For instance, one of them confidently stated,

"You can come and make a surprise visit to any of my class and I assure you, that you will not find the teacher teaching the whole class for the entire teaching time".

The cluster heads also shared that majority of the times during their classroom visits they had found teachers and students engaged in the activity based methods and not the traditional way of teaching art. The teachers tried to engage children by using questions and real life examples for discussion and explanation, and systematically conducted the class from introduction to conclusion. The cluster heads shared their perceptions like,

"Now one does not find the teacher shouting to control the chaos in the class like earlier".

"Most of my teachers are more patient"

However, all three cluster heads expressed that theactual activity gets diluted in enactment. For instance one cluster head shared that

"During a micro-teaching session, they may have discussed many more examples of questions that can be asked for involving children in a discussion, however many are forgotten during the actual class".

Another center head explained the reason for this saying

"Para-teachers do not integrate all suggestions of peers into their lesson plan, and

therefore they often forget the ideas".

Another concern shared was that most para-teachers tried to formulate behavior norms with children but did not consistently reinforce desirable behavior and discourage non-desirable behavior. As a result, children discussed 'how to behave' but often slipped into old behavior.

Para-teachers also reflected on their own classroom practices. They felt that they knew how to group children, use a practical activity to teach art as well as teach in a more structured way. However, their main concerns were how to use this practical approach with other subjects like math and science; and regulating the behavior of children more effectively.

Conclusion

This study looked for evidence to indicate if and to what extent participants have acquired lesson planning skills as a result of the professional development. As lesson planning support was provided through various strategies, the study also looked for how the para-teachers experienced them. Moreover, lesson planning is meant to enhance their own enactment, and if the participants did not experience more satisfying classroom experiences, lesson planning would not be meaningful. Hence, the study explored perceptions about changes in classroom enactment, as well.

Overall, the participants' first professional development experience was positive. Their interview responses indicate that each core and support strategy contributed to their professional learning and confidence. Their perceptions also clearly highlight some attributes of the professional development which contributed to the positive experience. These include more practical strategies like demonstrations and micro-teaching; joint rather than individual planning and reflection; immediate ongoing support by coaches during daily planning and reflection; and active facilitation by the coach during weekly reflections.

An additional conclusion is that para-teachers learned lesson-planning skills through this professional development experience. Most participants got a high or moderate score for quality parameters of completeness, accuracy and appropriateness as well as for the different questions. Such scores as well as the interview data, help to conclude that para-teachers had gained considerable knowledge about different components that lead to a well-structured lesson plan, for example, topic introduction, step by step application of learning activity and materials or lesson conclusion. Similarly, both types of data reflect a learner-centered orientation in choices about grouping, questions, examples and practical activities. Overall, as compared to the pre-professional development period, when teaching was ill-structured and incoherent, as well as rote-based, the findings of this study indicate a strong shift towards better structured and learner-centered lesson-planning skills.

Perceptions from both para-teachers and cluster heads indicate that para-teachers' enactment had improved in terms of being more systematic and more learner-centered as compared to what it was before the professional development experience. Cluster heads were confident that classroom teaching practices reflected greater use of group work over whole class methods, more practical learning activities, and questions and examples instead of rote methods. Cluster heads felt that there was dilution between lesson-planning and enactment. This can be explained in two ways. On one hand, it takes experience to transfer knowledge to practice (which

these para-teachers lacked) and on the other hand, the participants' lesson plans were not worked out in sufficient detail. Both lesson-planning and interview data helped identify that para-teachers continued to experience difficulty in planning for and implementing disciplining strategies successfully.

Discussion

This study clearly showed that para-teachers had learned from the professional development program. Learning about lesson planning was almost completely achieved during the first week of the program, and remained relatively stable over four weeks. This suggests that that the initial uptake of the lesson-planning skills was strong, and despite dealing with new topics to be taught every day, the initial momentum was well-retained throughout the whole month. Educational innovations very often do not succeed because teachers learn about new things but do not necessarily retain or implement them. In this study, lesson plans suggest high retention and interviews also reflect participants' enthusiasm about using lesson plans.

Three factors likely contributed to the high and stable levels of retention. First, there was ongoing support for joint lesson-planning. Second, basic and leaner-centered pedagogical concepts to be learnt by the participants were very carefully chosen, while, keeping their capacities in mind. Strategies like group work, practical activities, and questions were some approaches that were chosen as realistic learner-centered aspects. Sullivan (2004) in a study conducted in Namibia, asserted the need for selecting simple achievable learner-centered skills which would begin to lead teachers away from traditional approaches. Such approaches may not be ideal learner-centered approaches, but could potentially lead to the successful development of teachers' capacities to implement learner-centered approaches in the future (Sullivan, 2004).

Third, the immediacy of daily lesson-planning with enactment helped. Para-teachers could use everyday planning in the course of their daily work, and it did not use up additional time. Embedding learning activities into the daily time table has been viewed as important for workplace learning and teacher development (Bredeson, 2000; Loxley, 2007). Further, each day's learning activity focused on content to be taught immediately; a factor which has been emphasized in the professional development of under-trained teachers (Ruby, 2006).

The scores remained relative static over the four weeks, and several explanations might account for this:

- Since the initial uptake was high among many para-teachers, there could have been a ceiling effect, in which para-teachers rapidly achieve high proficiency levels of basic skills but it takes much more time to reach a higher level.

- Planning, reflection and writing are both new and difficult procedural skills for para-teachers.

- Para-teachers were planning for new subject matter topics everyday within 60- 90 minute periods during which they had to study the teacher guides and adapt the characteristics to their lesson-planning templates, this time may have been to short.

- With new procedural skills, new subject matter, new learner-centered

approach and little time for planning, para-teachers may have focused more on maintaining a basic level of planning quality, and may have found it difficult to consolidate and incorporate new ideas in to their lesson plans.

- Each cluster head had to support about ten para-teachers while also having no experience working with lesson plans or teaching the art content. Hence, the coaching support was very valuable in terms of providing motivation and helping with basic doubts, but less effective in terms of helping the quality of lesson-planning improve substantially after the first week, during which several senior management team people were present as facilitators.

- The quality parameters only help view very basic development in the lesson-planning skill, subtleties in the lesson plans may have been overlooked.

This article speaks to researchers and practitioners who are studying and creating professional development for para-teachers working in under-resourced environments. It demonstrates that appropriate preparation for para-teachers through adequate professional development can lead to positive learning experiences and new skills. This approach may address criticism about the low level of training of these highly-motivated, much-needed teachers.

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