

AN EDUCATION PROGRAM CALLED ‘PROGRAM KHAS LESTARI PENDIDIKAN (PKLP)’ – AN INNOVATION TO IMPROVE QUALITY OF MATHEMATICS TEACHERS IN NATIONAL PRIMARY SPECIAL NEEDS SCHOOL IN SELANGOR MALAYSIA

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Abstract

An education programme for special needs children called “Program Khas Lestari Pendidikan” in National Primary Special Education School of Selangor is an innovation to outburst District Education Office of Petaling Perdana. The main purpose is to increase the school’s band from Band 6 (the lowest band in the district) to a higher band. This programme was planned carefully which was carried out for a nine-month period (Mac - November) and involved all School Improvement Partners Plus (SIP+) and School Improvement Specialist Coaches Plus (SISC+). The teachers were coached collectively and individually. Group programmes consisted of four series which focused on pedagogy, motivation and exposure on answering techniques examination questions of the National Primary Examination. The individual guidance was given once a month (March – September) in a classroom after teaching and learning had taken place. The program results showed a success rate in the aspect of quality improvement and teachers motivation. Sharing of experience from SISC+ on mathematic subject while carrying out “Program Khas Lestari Pendidikan” will give a valuable perspective and examples of the best practices to uphold the quality of teachers teaching and learning in the special needs schools.

Introduction

The special education needs (SEN) students in Malaysia are categorized into three main disabilities: the hearing impaired, the visual impaired and the learning difficulties students

(Ministry of Education Official Portal, 2014). National Primary Special Education School of Selangor Malaysia is a school categorized into the hearing impaired and learning difficulties.

MOE (2009) stated in their report that they are facing difficulty in providing enough trained and skillful teachers who are efficient in managing, teaching and caring for all the different categories of SEN students ranging from the hearing impaired to visual impaired and the learning difficulties students. For example, this school teachers need training on sign languages both in English and National language in order to carry out daily teaching and learning process in classroom.

Several factors such as lack of understanding and awareness among teachers and schools administrators in the SEN schools and lack of skillful teachers in handling the diverse needs of the students will form barriers towards better quality of education programs. Teachers' teaching quality is one of the most significant factors in student learning (DuFour & Mattos, 2013). Besides that the common teaching methods that teachers prefer today is the lecture method. Using this method, teachers believe that they transmit knowledge to the students who sit passively in the classroom and listen. Another most common method is the question-and-answer approach, which was developed in order to avoid the boredom caused by lectures and to provide more efficient learning environment. According to Harnani & Nor (2010), traditional teaching focused more on the lecture method in delivering the content to the students and they used one way communication to explain the idea or principle. The students become a passive participant in class. This situation will lead the students to become bored to learn and finally will influence their academic performance. Furthermore, the tendency of putting too much emphasis on the academic achievement would pose difficulties for these students to compete with their peers when there is no support by resource teachers or teachers' aids. (MOE, 2009).

School Improvement Partners Plus (SIP+) and School Improvement Specialist Coaches Plus (SISC+) of District Education Office of Petaling Perdana were entrusted to guide administrators and teachers of National Primary Special Education School of Selangor in Band 6 (the lowest band in the district). The initial observation shows that the majority of teachers in this school have a low level of motivation as well as the teaching and learning practices less effective in classroom. Teachers are not conversant to implement appropriate teaching and learning in classroom. Even though the number of pupils in the class is small, but the quality of teaching does not give a full impact to students understanding. In addition, teachers tend to educate these special education pupils by their own mindset. The assumptions of teachers are their pupils may not be able to achieve a level of performance like pupils mainstream group. These pupils will follow the national curriculum, and the majority will undergo public examinations or called "Ujian Penilaian Sekolah Rendah" (UPSR).

Problem Statement

All the recruitment of special education teachers in Malaysia are done by 'Bahagian Pendidikan Guru' (BPG). These teachers are trained in teachers training college or universities for a specific number of years and later posted to selected schools. However,

the school teachers are not specially trained for hearing impaired students. They have to learn on their own how to use sign languages in the school. Each teacher takes maximum of 6 months to be well verse in the sign languages. All the students in this school are hearing impaired and learning disabilities. Teachers are not conversant to implement appropriate teaching and learning in classroom. Even though the number of pupils in the class is not more than ten, but the quality of teaching does not give a full impact to pupils understanding. The teachers were not able to convey the lesson based on the standard curriculum designed. Teachers have to use many interesting and appropriate ways in teaching and learning process (Nachiappan et al, 2014).

Research Focus

The focus group for the current research was on Mathematics teachers teaching and learning quality. In the District Transformation Program, which is under Malaysia Education Blueprint 2013-2025 addresses SISC+'s accountability is in supporting teachers' continuous professional development on ground (PEMANDU, 2014). Thus, SISC+ does not assess, judge nor evaluate teachers' actions in classrooms. On the other hand, we only observe teachers' practices in classrooms. These observations do not mean to discredit nor make teachers stressed out (Eow, 2014).

Research Objective

The objective of this research is to analyse the effectiveness of "Program Khas Lestari Pendidikan (PKLP)" towards the quality of teaching and learning of mathematics teachers in the SEN schools.

Research Questions

How does PKLP improve the quality of mathematics teachers in teaching and learning?

Research Methodology

PKLP is a program designed especially for this school. This is the only school in the district with the lowest band. This programme was planned carefully which was carried out in nine-months period (Mac - November) and involved all School Improvement Partners Plus (SIP+) and School Improvement Specialist Coaches Plus (SISC+). The teachers were coached collectively and individually. Group programmes consist of four series which focuses on pedagogy, motivation and exposure on answering techniques examination questions of the National Primary Examination. The individual guidance was given once a month (March – September) in a classroom after teaching and learning had taken place.

The research was conducted through qualitative research methods. Observations were carried out during teaching and learning process in the classroom using an observation tool called Teacher Coaching Tool (TCT). This is an instrument used to gauge the teachers' quality. The TCT tool consists of 12 aspects. There are Learning Objective (A1), Lesson Plan (A2), Learning Based Activities (A3), Communication in Classroom (A4), Pupil's Focus and Attention (A5), Classroom Management (A6), Teaching Aids (A7), Knowledge of Content (A8), Oral Assessment (A9), Written Evaluation (A10), Conclusion (A11) and Reflection (A12). Teaching and learning observation using TCT was conducted on three Mathematics' Teachers. Their quality of teaching was investigated base on 12 aspects by

using TCT that consists of 4 levels which are Level 0(L0) for none, Level 1(L1) for poor, Level 2(L2) for good and Level 3 for excellent. After each observation, SISC+ will coach their teachers outside of the classroom individually based on observation results following each aspects. Besides this, an interview was conducted on a Mathematics teacher to see the effectiveness of coaching, focusing on teacher quality based on the TCT tool.

Discussion of the Findings

The mathematics teachers teaching quality in classroom were determined by SISC+s' through observation and coaching and mentoring from June 2014 until November 2014. TCT was used as a tool of teacher's observation in classroom during teaching and learning.

Table 1 shows the observation results of Teacher 1 for first and second observation sessions. After the first observation, SISC+ coached the teacher individually to improve the teaching quality. First coaching is stated as C1 and second coaching as C2. Based on observation, for the aspects of A3, A4, A5, A7 and A9 indicate an improvement from Level 1 for C1 to Level 2 for C2. Meanwhile both aspects A1 and A10 show an improvement from Level 0 to Level 2 at C1 and C2 respectively. A1 and A10 show the best improvement. This is very great improvement as it shows the teacher is able to identify and practice the learning objectives of the lesson focusly and able to give written evaluation. At the same time both A11 and A12 aspects show an improvement from Level 0 to Level 1. For A2, A6 and A8 remain at Level 2. Total score for C1 is 11 and C2 is 22. Overall, the teaching quality of Teacher 1 increased through the first coaching session. This was proved from the TCT.

Table 1 - TCT of Teacher 1

NO	OBSERVATION ASPECT	LEVEL	
		C1	C2
A1	Learning Objectives	0	2
A2	Lesson Plan	2	2
A3	Learning Based Activities	1	2
A4	Communication In Classroom	1	2
A5	Pupil's Focus And Attention	1	2
A6	Classroom Management	2	2
A7	Teaching Aids	1	2
A8	Knowledge of Content	2	2
A9	Oral Assessment	1	2
A10	Written Evaluation	0	2
A11	Conclusion	0	1
A12	Reflection	0	1
TOTAL SCORE		11	22

Figure 1 shows TCT comparison in bar graph for Teacher 1 after first and second observation in classroom. C1 and C2 were done separately. C2 took place two months after

C1. In previous discussion, after coaching, there was an increment for the whole aspects except A2, A6 and A8 that remain at same level.

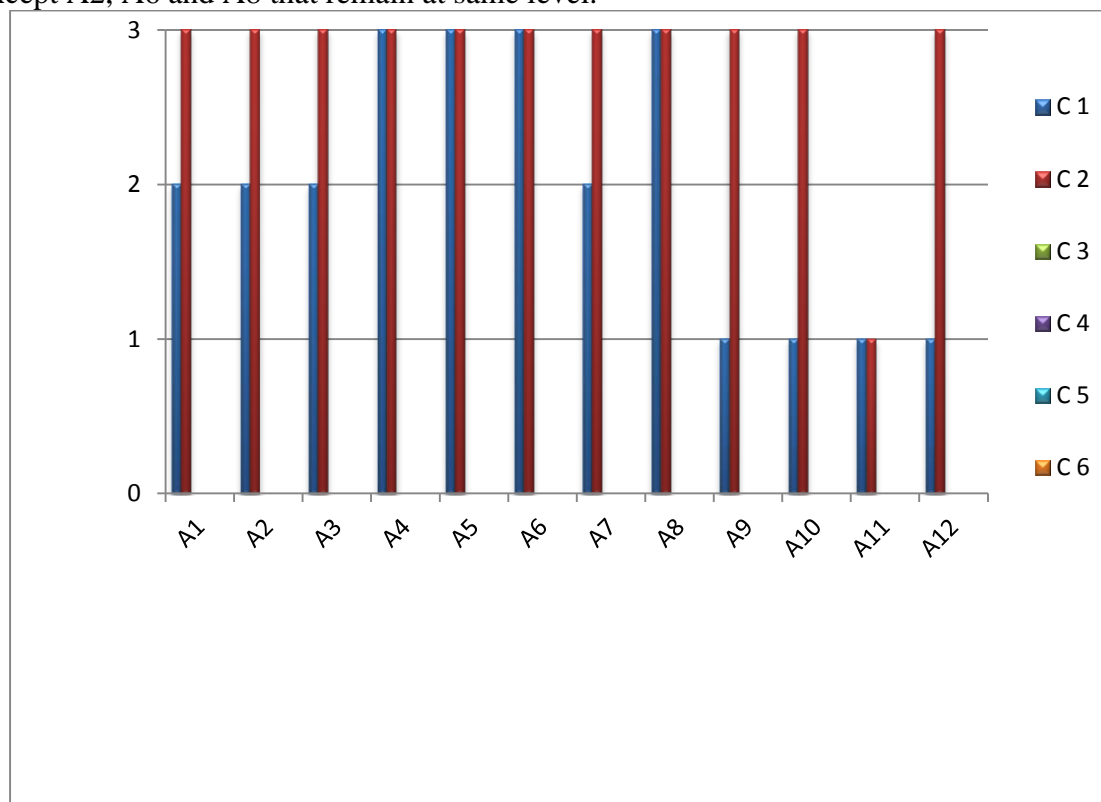


Figure 1 - TCT's Graph for Teacher 1

Table 2 shows quality of Teacher 2 for first, second and third coaching session. First coaching is stated as C1, second coaching as C2 and third coaching as C3. A3 and A6 indicate an increment, for C1 at Level 1, C2 at Level 2 and C3 at Level 3. Aspect of A2 and A8 shows an improvement for C1 and C2 but in C3 remain at Level 2. After C2, we can see the best improvement of the teacher's teaching for A3, A4, A5, A6 and A7. Now the teacher can use appropriate and suitable teaching aids in classroom as well as can manage the classroom effectively. Total score for C1 is 13, C2 is 21 and C3 is 29. As conclusion, the quality of Teacher 2 is increasing through the coaching session.

Table 2 - TCT of Teacher 2

NO	OBSERVATION ASPECT	LEVEL		
		C1	C2	C3
A1	Learning Objectives	0	2	2
A2	Lesson Plan	1	2	2
A3	Learning Based Activities	1	2	3
A4	Communication In Classroom	2	3	3
A5	Pupil's Focus And Attention	2	2	3
A6	Classroom Mangement	1	2	3
A7	Teaching Aids	0	1	3
A8	Knowledge of Content	1	2	2
A9	Oral Assessment	1	1	2
A10	Written Evaluation	0	1	2
A11	Conclusion	0	1	2
A12	Reflection	0	2	2
TOTAL SCORE		8	20	29

Figure 2 shows Teacher Coaching Tool's graph for Teacher 2 at first, second and third of coaching. In previous discussion, after coaching session, there was an increment for the whole aspects consisting in TCT.

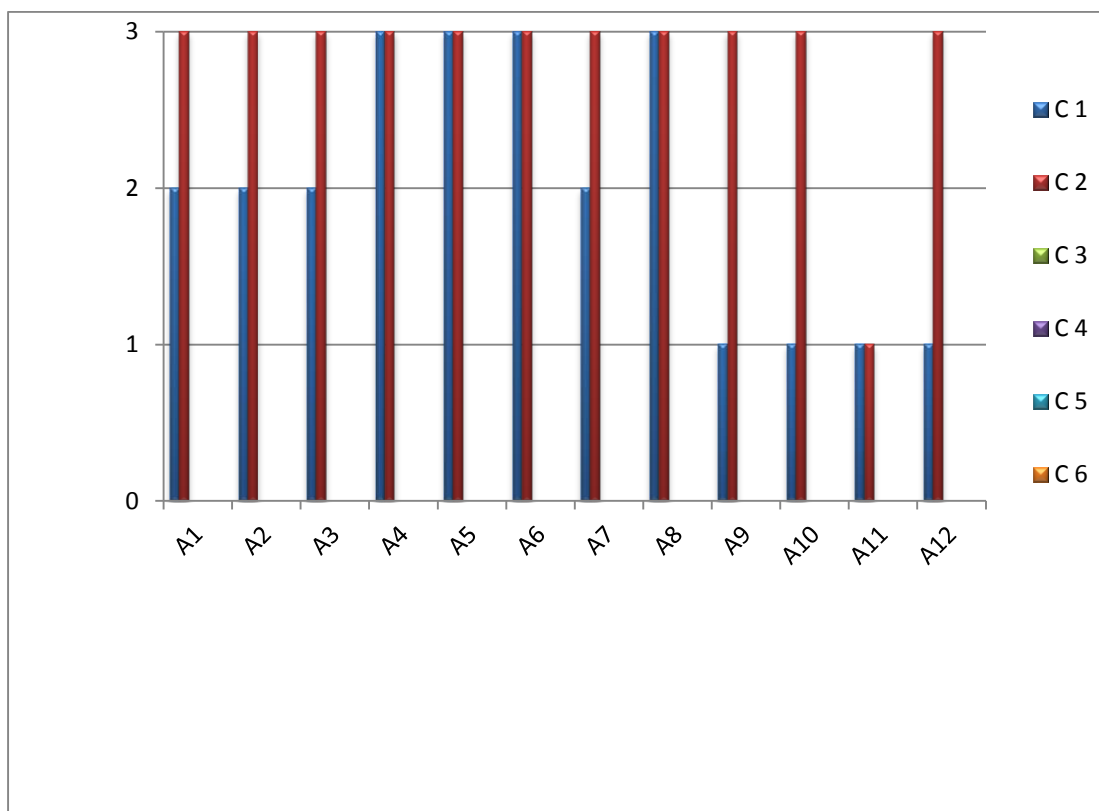


Figure 2 - TCT's Graph of Teacher 2

Table 3 shows quality of Teacher 3 for first and second coaching session. A1, A2, A3 and A7 indicate an increment from Level 2 for C1 to Level 3 for C2. A9, A10 and A12 aspects have reached the highest level which is Level 3 for C1 and C2. There is no change in A11. This aspect remains at Level 1 for both coaching session. Total score of C1 is 24 and C2 is 34. In conclusion, quality of Teacher 3 is increase through the coaching session. There are drastic changes after coaching section 1, especially for A9, A10 and A12. This result shows that now the teacher able to teach the SEN pupils effectively in classroom.

Table 3 - TCT of Teacher 3

NO	OBSERVATION ASPECT	TAHAP LEVEL	
		C1	C2
A1	Learning Objectives	2	3
A2	Lesson Plan	2	3
A3	Learning Based Activities	2	3
A4	Communication In Classroom	3	3
A5	Pupil's Focus And Attention	3	3
A6	Classroom Management	3	3
A7	Teaching Aids	2	3
A8	Knowledge of Content	3	3
A9	Oral Assessment	1	3
A10	Written Evaluation	1	3
A11	Conclusion	1	1
A12	Reflection	1	3
TOTAL SCORE		24	34

Figure 3 shows Teacher Coaching Tool's graph for Teacher 3 at first and second of coaching. In previous discussion, for second coaching, there is an increment for the whole aspects except Communication in Classroom, Student's Focus and Attention, Classroom Management, Content of Knowledge and Conclusion of Teaching.

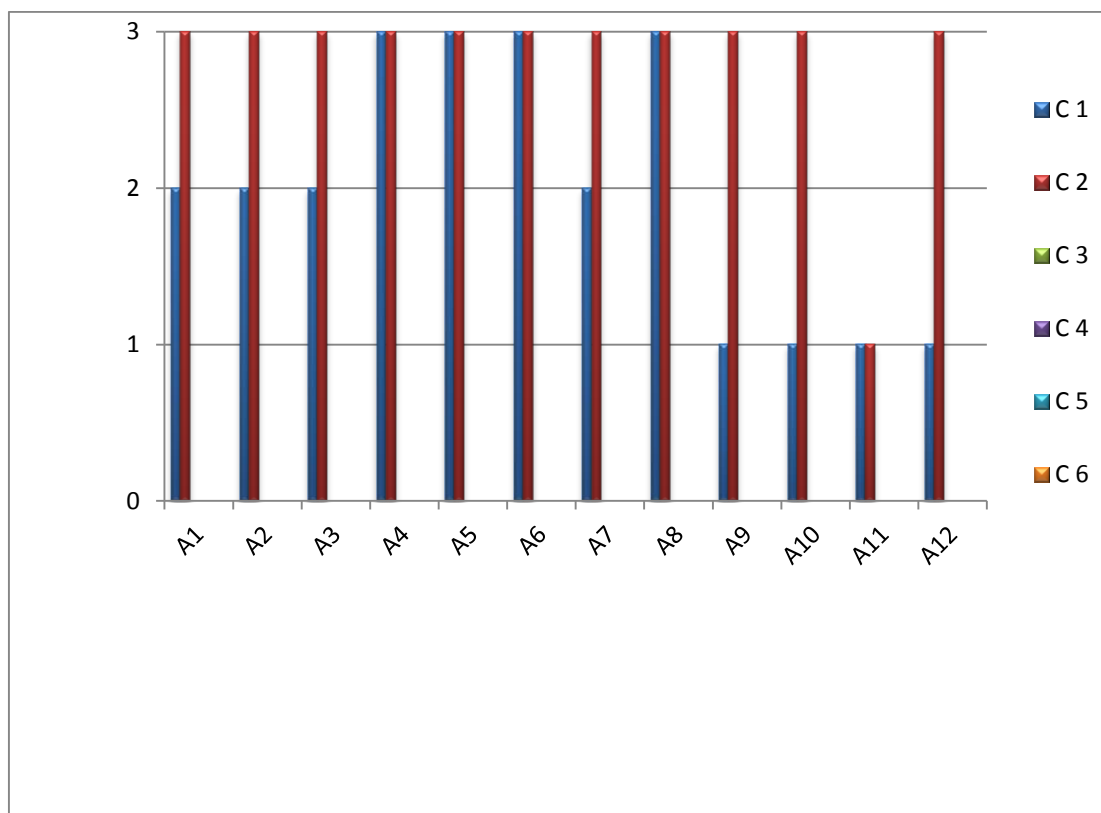


Figure 3 - TCT for Teacher 3

In this study, observation of coaching was supported by interview with Teacher 3. The observation was taking the whole aspects in TCT but for Teacher 3 there were three aspects to be focus especially on Lesson Plan, Based Learning Activities and Teaching Aids. Therefore, the interview was conducted by focusing on three aspects.

In Lesson Plan, Teacher 3 did not write the lesson plan base on Standard Curriculum for Primary Schools' format (KSSR). Element Across Curriculum and Teaching Aids were not written in Lesson Plan.

“before this I didn’t put Across Element Curriculum in Lesson Plan, eventhough I appy it in teaching indirectly”

The teacher did not state clearly the learning activities and the activities also did not focus on students’ centered.

“before this, the activities more to teacher’s centered”

After coaching session there was an improvement on Teacher 3 for Lesson Plan. Based on Learning Based Activities, Teacher 3 has made changes from teachers centered to pupils’ centered activities.

“..but now, we do more to pupils, give more chances to pupils”

Teacher 3 also stated that there was no significant improvement in Teaching Aids but there is a different after coaching.

“The improvement was not so high, but there was a different.
May be because of the use of teaching aids is still low”
There are not many changes because....but still
difference-difference method given by SISC+ helps me
improve ...especially the use of existing surrounding
teaching aids. We use the same teaching aids with different
method. “

Based on the observations in classes, it was discovered that all the mathematics teachers treat teaching as a routine task. This is especially true for teachers, whom we assumed as experience teachers. Thus, they teach with minimum preparation before SISC+'s coaching and methoring. Now, it can be concluded that SISC+'s individual coaching in the classroom using TCT as tool can improve teachers' quality on Lesson Plan, Teaching Aids and Learning Based Activities.

Conclusion

In providing better teaching and learning for pupils with special needs, the main concern is on the effectiveness of the teacher delivery in the classroom. Based on the study that has been conducted, PLKP programme is proven to be able to improve teachers' quality of teaching and learning. This can be seen from the observation by using TCT and supported by interview findings. The respondent of the research shows that Mathematical Teaching and Learning can be improved even though the pupils have learning disabilities and hearing impairmen. There are limitations in this programme, such as there is no SISC+ who has expertise in SEN. The teachers need the expertise on this field so they can gain more knowledge to improve their skills in special education. We hope this programme could bring improvement towards the transformation of education.

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