Implementing Educational Innovation: Learning from the Classroom Interaction of Effective Bahasa Melayu Teachers in Malaysia

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ABSTRAK

Kertas ini melaporkan satu kajian pengajaran di bilik darjah selepas lima tahun pelaksanaan Kurikulum Bersepadu Sekolah Menengah (KBSM) di Malaysia. Kajian ini mengambil kira sebahagian amalan 12 guru Bahasa Melayu yang dikenal pasti berkesan mengajar pelajar berumur 12-13 tahun melalui cerapan sistematik. Berbeza dengan falsafah KBSM, guru-guru tersebut cenderung menggunakan strategi pengajaran tradisional seluruh kelas dan menguasai interaksi dalam bilik darjah. Hasil kajian ini mencadangkan perlunya mengambil kira pengetahuan profesional guru yang sedia ada serta kepercayaan mereka tentang gagasan amalan pengajaran yang baik dalam merancang dan melaksanakan program-program pendidikan guru dalam perkhidmatan.

ABSTRACT

This paper reports a study on classroom teaching techniques five years after the implementation of the Integrated Curriculum for Secondary Schools (KBSM) in Malaysia. Systematic observation was made of the classroom practices of 12 Bahasa Melayu teachers who were identified as effective in their teaching of 12-13 year-old pupils. Contrary to the philosophy of the KBSM, the teachers were inclined to use traditional whole-class teaching strategies and to dominate classroom interaction. The study concludes that there is a need to consider the existing teachers' professional knowledge and their beliefs about the notion of good practice when designing and implementing in-service teacher education programmes.

INTRODUCTION

Evidence suggests that the success of educational innovation in the classroom is associated with the teachers (Fullan and Hargreaves 1992). However, with the increasing reality of imposed innovation in many countries (UNESCO 1986), teachers have, to some extent, been neglected and their participation in the development and dissemination of most planned educational change has been underestimated. Moreover, the lack of research in the developing countries dealing with the unique local situation tends to increase reliance on foreign educational concepts in the planning and implementation of such innovations. There

is a need to consider how teachers implement the innovation in their classroom teaching in such a situation (Knight and Smith 1989; Fullan 1991).

One example of recently planned educational innovation is the introduction of the Integrated Curriculum for Secondary Schools, better known by its Bahasa Melayu acronym KBSM. The implementation of the KBSM in 1988 was driven by the need to achieve the aims of the National Educational Philosophy (NEP) to not only equip individuals with the appropriate knowledge and skills, but also to produce responsible citizens with strong moral and ethical values.

target pupils. There were 264 target pupils (126 male and 138 female), with a gender composition mean of 15.3 males and 16.8 females per lesson.

The data were gathered from 44 lessons of Form One teachers. The observation using the Teacher Record yielded a total of 1,100 observation episodes, with a total observation time of 458.33 minutes. The Pupil Record, focusing in each lesson on the six "target" pupils, yielded a total of 1,584 observation episodes with a total observation time of 660 minutes for 264 target pupils. A descriptive statistical analysis was employed. The initial step of analysis was to get frequencies and percentages of occurrences of all categories of the Teacher and Pupil Records (Croll 1980).

RESULTS

Teachers' Classroom Activities

The effective Bahasa Melayu teachers spent most of their classroom time (90.2% of all observations) interacting with their pupils (Table 1). The main form of the interaction was conversation (69.8% of all interactions). Silent interaction such as gesturing, demonstrating, marking and waiting occupied the rest (30.2%). Their conversation was mainly in the form of "statements", that is utterances which do not seek an answer (67.1% of all conversations) and of "questions", that is utterances which seek an answer (32.9%).

Further analysis of teachers' activity indicated that the major type of teachers' statements were related firstly, to "task supervision", that is statements which monitor and maintain the task activity (49.2% of all teacher statements), and secondly, to "task", that is statements associated with the theoretical, practical or observational content of a pupil's work (40.4% of all teacher statements). Only a small proportion of the teachers' statements were related to routine matters of classroom management (10.4%).

In contrast, most of the teachers' questions referred to the task, that is questions about the theoretical, practical or observational content of a pupil's work (54.1% of all teacher questions) rather than to the task supervision which covered questions which resulted in the pupil reflecting over whether or not she/he has finished her/his work and recalling the teacher's instructions about her/his task (41.1% of all teacher questions). Detailed analysis

TABLE 1
Teachers' activity in the classroom

Activity	Percentage of all observations	Percentage in each major activity
A. Making statements		
Task:		
1. Of facts	6.9	16.3
2. Of ideas, problems	10.2	24.1
Task supervision:		
3. Telling pupil what to do	7.7	18.2
4. Praising work or effort	9.0	21.3
5. Feedback on work or effort	4.1	9.7
Routine:		
6. Routine information	1.5	3.5
7. Routine feedback	0.3	0.7
8. Critical control	0.5	1.2
9. Of small talk	2.1	5.0
Sub-total	42.3	100.0
B. Questioning		
Task:		
1. Of facts	1.2	5.8
2. Closed questions	2.1	10.1
3. Open questions	7.9	38.2
Referring to task supervision	8.5	41.1
Referring to routine matters	1.0	4.8
Sub-total	20.7	100.0
C. Other interactions		
1. Gesturing	8.5	31.3
2. Demonstrating	2.7	9.9
3. Marking	6.0	22.1
4. Waiting	3.2	11.8
5. Reading	6.8	25.0
Sub-total	27.2	100.0
D. No teacher-pupil interaction		
1. Visiting pupil	0.2	2.1
2. Totally distracted	8.8	91.6
3. Out of room	0.6	6.3
Sub-total	9.6	100.0
Total	100.0	

indicated that the effective Bahasa Melayu teachers used more "open" questions which stimulated pupils' imagination and reasoning (38.2% of all teacher questions), than questions

associated with factual answers (15.9%). The high proportion of "open" questions is consistent with the enquiry and discovery learning strategies recommended by the KBSM.

Patterns of Teacher-Pupil Interactions

The results from the Teacher Record showed that most teacher-pupil interactions (70.5%) focused on pupils as members of the whole class (Table 2). Less than one-fifth (17.1%) of all interactions were directed to the pupils as members of a group and 12.4% to pupils working alone.

TABLE 2

Audiences of the teacher-to-pupil interactions in the effective Bahasa Melayu teachers' interactions

	Percentage based on total observations		Percentage based on total interactions	
Teacher interacts with:	Pupil Record[a]	Teacher Record	Pupil Record[a]	Teacher Record
Individual	1.6	11.2	64.0	12.4
Group	.8	15.5	32.0	17.1
Whole class	.1	63.8	4.0	70.5
Total interactions	2.5	90.5		
No interaction	97.6	9.5		
Total	100.0	100.0	100.0	100.0

Note: [a]Includes only when there was a pupil-to-teacher conversation; i.e., excluded 35.9% of the pupils' silent interaction with the teacher on-task.

On the other hand, the Pupil Record indicated that pupils only interacted verbally with their teachers for about 2.5% of all observations. When the pupils did communicate, they interacted with the teachers mainly as individuals (64.0% of all pupil-teacher interaction). This implies that only a small amount of individual attention was given even by those teachers considered to be "effective" by the education authorities.

Detailed analysis of their activities showed that pupils worked alone most of the time (44.2% of all observations), mainly on the task (29.7%). At other times, they interacted with their teachers (38.4%), mainly by observing and listening to the teachers' presentation (35.9%). Only 17.4% of observations show pupils interacting with their peers, mainly on the task (14.1% of all observations). This suggests that these teachers need to improve their pupil-centred strategy if they want to enhance their teaching parallel to prescriptions in the KBSM modules. If this is not happening, even by effective teachers, it is argued that the prescription on pupil-centred strategies in the modules is contested.

Tasks and Audiences of Interactions

The contents of teachers' conversations overwhelmingly (91.5%) related to the task and its associated supervision (Table 3). A distinction was made between "task" utterances (i.e. all teachers' utterances referring to the substantive content of the topic under study which contains a definite cognitive content) and "task supervision" (i.e. any utterances concerned with monitoring and maintaining the task activity which do not contain a substantial cognitive content in themselves). An important question, which is beyond the scope of the study, is how good were the tasks.

TABLE 3

Tasks and class audience of the effective Bahasa Melayu teachers' conversations (Percentage of questions and statements)

Task contents of the conversations	Percentage of all conversations	Percentage of class conversations
1. Task	44.9	49.4
2. Task supervision	46.6	41.5
3. Total (1 and 2)	91.5	90.9
4. Routine	8.5	9.1
5. Total (1, 2 and 4)	100.0	100.0
Task conversations		
6. Higher level	28.7	24.5
7. Lower level	16.2	15.4

Detailed analysis of the "task" conversations indicated that there were more higher order conversations (statements and questions which stimulated pupils' imagination and reasoning - 28.7% of teacher conversations) than lower order conversations (statements and questions about

the factual information - 16.2% of teacher conversations). Both types of conversations were most common in whole class settings (85.4% of higher order and 95.1% of lower order task conversations).

Noble Values

The KBSM recommended that effective teachers should promote noble values. The results of these observations suggested that the teachers spent 4.1% of their time on such promotion (Table 4).

TABLE 4

Inculcation of the noble values in the effective Bahasa Melayu teachers' interactions

Noble Value	Percentage of observations	Percentage of statements or questions
1. Kindness	0.5	0.9
2. Mutual respect	0.2	0.3
3. Caring	2.4	3.7
4. Physical and mental purity	0.2	0.3
5. Honesty	0.1	0.1
6. Co-operation	0.2	0.3
7. Gratitude	0.4	0.6
8. Rationality	0.1	0.1
Total	4.1	6.3

Of the 16 noble values specifically prescribed in the KBSM, only eight were observed in the effective Bahasa Melayu teachers' lessons. These values were "kindness", "mutual respect", "caring", "physical and mental purity", "honesty", "co-operation", "gratitude", and "rationality".

Classroom Organization

Most pupils sat in groups (95.8% of all observations), usually in pairs of the same gender (48.9%) (Table 5). However, it is well known that seating arrangements do not imply that the curriculum is geared to group learning. In 24.2% of cases, groups were of mixed gender.

Pupil Achievement and Tasks

The relationship between teacher attention and pupil achievement gathered from the Pupil

TABLE 5

Pupils' seating arrangements in the effective Bahasa Melayu teachers' classrooms (Percentage of observations)

Seating base	Percentage
Alone	4.2
Pair, of the same gender	48.9
Pair, of the opposite gender	13.6
Several, of the same gender	22.7
Several, of the opposite gender	10.6
Total	100.0

Record indicated that there was no significant difference ($\chi^2 = 3.81$, p > 0.05) in the distribution of the teacher-pupil interaction between the three groups of pupils. This may be related to the very small proportion of pupil-teacher conversations (2.5% of all observations). The high achievers received more attention as individuals (0.9% of all observations) whereas low achievers received more attention as members of a group (0.6% of all observations) (Table 6).

TABLE 6

Pupils' achievement, audience and tasks in the effective Bahasa Melayu teachers' interactions (Percentage of observations)

Audience and task contents	Percentage		
	High achievers	Medium achievers	Low achievers
1. All teacher-pupil interactions	1.1	0.5	0.9
a. Individual interaction	0.9	0.4	0.3
b. Interaction as group member	0.1	0.1	0.6
c. Interaction as class member	0.1	-	-
d. Teacher ignores pupil's attempt to initiate interaction	0.1	-	-
2. Task-related contents:			
a. Interaction on task	1.1	0.4	0.9
b. Interaction on routine	0.1	0.1	-
Number of cases	88	88	88

Pupils' Gender and Tasks

The data from the Teacher Record showed that there were highly significant differences in the attention given by the effective Bahasa Melayu teachers to pupils of different genders (χ^2 = 12.9, p < 0.01). The data from the Pupil Record indicated that girls received more than twice as much teacher attention than the boys (1.8 and 0.7% of observations respectively) (Table 7). Girls also received more attention than boys with regard to the tasks.

TABLE 7

Pupils' gender, audience and tasks in the effective Bahasa Melayu teachers' interactions
(Percentage of observations)

Audience and tasks	Percentage	
	Boys	Girls
1. All teacher-to-pupil interactions	0.7	1.8
a. Individual interaction	0.5	1.1
b. Interaction as group member	0.2	0.5
c. Interaction as class member	-	0.1
d. Teacher ignores pupil's attempt to initiate interaction	-	0.1
2. Task-related interactions:		
a. Interaction on task	0.6	1.7
b. Interaction on routine	0.1	0.1
Number of cases	132	132

Further analysis of the results indicated that the teachers' gender had a significant association (χ^2 = 29.83, p < 0.05) with their interaction with boys and girls. On average, the male teachers were inclined to interact with the female pupils about two-and-half times more than the female teachers did.

CONCLUSIONS

What can we learn from the practices of effective Malaysian teachers of Bahasa Melayu? Five years after the implementation of the KBSM, the findings suggested that the teachers followed only some of the prescriptions of the KBSM, such as those with regard to the types of questions and maintaining the engagement of pupils on the task. However, there is little evidence, even from the practice of effective Bahasa Melayu teachers, that the teaching and learning processes underlying the KBSM curriculum of inculcating knowledge, skills and values are being implemented; nor that the KBSM was considered as giving new status to the pupils as the key players, and the teacher as counsellor; let alone that the pupils were becoming an active factor, whereas the teacher was being the motivator and source of stimulus, a mover of teaching and learning, as claimed by the Ministry (Ministry of Education 1990a, 1990b).

Teachers had little involvement in the development and dissemination of educational innovations such as the KBSM. Their participation is mainly at the implementation stage. While their involvement at the earlier stage of innovation is reported to have some disadvantages (Fullan and Pomfret 1977), without it the genuine intention of the innovation will disperse along the drain of educational bureaucracy and the "new" content of such an innovation is subject to variations of interpretation before it reaches the teacher. As the implementation becomes more complicated, the more the innovation is opened to interpretation, and the more fragile is the business of innovation.

The early involvement of teachers is also necessary to inject current professional knowledge in the development of innovation, especially since the existing affected teachers have already developed their own sustainable approaches towards good practice which are hard to change. Quite often, any attempt to introduce educational change is seen as a disturbance. The unfamiliar "new" content of innovation might involve de-skilling of their existing practices (Vulliamy and Webb 1991). The failure to implement the innovation successfully has tremendous effect of "guilt and frustration at not being able to meet the standards" (Fullan and Hargreaves 1992, p. 6). Faced with the "unrealistic" innovation, they have to make an appropriate professional decision, often based on their beliefs about good practice in such a situation (Knight and Smith 1989).

Since the implementation of the KBSM is underway, how should we implement effectively a policy which is, in practice, being rejected and subverted? One might say that an alternative is to abandon the KBSM ideals and adopt a more limited set of goals based upon the more conservative, teacher-defined view of good practice. However, this is very unlikely, at least at

present, because not all elements of the KBSM are unusable. Another possibility is to improve the situation, especially through teacher development. As suggested by the Minister (Sulaiman 1991), teacher education must do a better job in identifying the kind of professional knowledge, skills and values necessary to prepare teachers to work in different contexts. There is certainly a need to consider the existing teachers' professional knowledge and their beliefs about the notion of good practice in the designing and implementation of in-service teacher education programmes.

As the best way to improve teaching practice lies not so much in trying to control teachers' behaviour as in helping them to control their own behaviour by becoming more aware of what they are doing (Elliot, in Day 1993), teachers' existing knowledge, beliefs and practice and the contexts in which they occur should be "scrutinized" and "supported". In-service teacher education should be designed, as suggested by Calderhead and Robson (1991), to cater for the various well-fixed images of teaching that teachers already have which affect what they get from their courses. This model of developing in-service teacher education is consistent with the idea of reflective practice (Schon 1983) and the idea of responsibility through partnership and coalition (Day 1993).

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