Factors Influencing Teaching Skills of Urban Primary School Teachers in Cambodia

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Abstract

Currently, efforts to improve the quality of teachers in Cambodia are underway. To contribute information that can be used in the design of interventions, this study was conducted. Focus was on determining the factors that influence teaching skills. Participants were 40 urban primary school teachers in Cambodia. Data were gathered by questionnaire and classroom observations. Results of the correlation analysis showed that teacher enthusiasm, teacher punctuality, pupil behavior, relation between the teacher and the pupils, the teacher's use of lesson plan, flashcards, supplementary exercises and visual materials were significantly positively related to the teaching skills. The teacher's use of textbook had a significant negative relationship with teaching skills. The stepwise regression analysis revealed that teacher enthusiasm, pupil behavior, visual materials and textbook contributed joint significant effects on teaching skills.

1. Introduction

After Cambodia was liberated from the governance of the auto-genocidal regime from 1975-1979 during which schools were completely closed (Mysliweic, 1988), the newly established Cambodian government reopened schools to respond to the needs of the nation's children. The urgency to fulfill the educational tasks at that time was not only the constructions of school buildings and the acquisitions of teaching and learning materials but also the availability of literate people who could teach school age children as 75 percent of teachers and/or educated people were either killed or fled the country since the beginning of the chaotic year of 1975 (Ministry of Education, 1990). In such difficult circumstances, the government, in an effort to provide school age children with education, had to recruit survivors whose basic qualification was the ability to read and write as teachers. A few years later in 1982, a better standard was set. Only students who graduated from grade 7 were recruited to be primary school teachers, receiving a minimal training in pedagogy and contents of the subjects to be taught (Bunroeun, 1999). This resulted in a vicious circle of incompetence: unqualified teachers teaching students who graduated to be unqualified teachers.

Although the situation has improved recently, poor quality of teachers is still a predominant problem

in the Cambodian primary education. Data show that only about 10 percent of the country's primary school teachers have completed upper secondary education and received at least one year of teacher training. Seventy-five percent of all teachers received no more than lower secondary education and some teacher training (UNESCO, 1999). This is far from the required number of years of schooling among primary school teachers -- that is, 12 years of general education and two years of professional teacher training (Bunroeun, 1999).

To address the low quality of the teachers, the government, in cooperation with non-government organizations and international agencies, has designed training programs to provide teachers with opportunities to update and upgrade their performances. These are done through various in-service training programs and regular school-based technical meetings on Thursdays during which teachers have an opportunity to interact with their peers to improve their mastery of the content and skills of the subjects to be taught. Common observations of the researcher and informal talks with some teachers and school principals, however, indicate that teachers would do their best to follow the procedures, practices or whatever they have learned from the technical meetings only when they are informed that inspectors or technical heads would come to observe their classes.

Many things, therefore, remain to be done to improve the quality of teachers in the Cambodian primary education. Thus, more strategic interventions need to be designed and implemented to address the prevailing problems. But to make these interventions more effective, there is a need for data that can serve as a guide in planning. It is within this context that this study was conducted. The focus of the study was to examine the influence of teacher gender, age, educational attainment, teaching experience, teacher punctuality, teacher enthusiasm, pupil behavior, relation between the teacher and the pupils and the use of textbook, lesson plan, flashcards, supplementary exercises, and visual materials on teaching skills.

2. Method

2.1. Participants

The participants in this study were 40 first grade teachers (5 males; 35 females) from 20 geographically proximate primary schools located in the southwestern part of Phnom Penh. The decision to focus on these schools was intended to minimize the effect of school cultures, pupil backgrounds and working conditions of the teachers on their teaching. Thirty-three teachers were lower secondary school graduates and seven were upper secondary school graduates. With ages ranging from 21-53 (M = 32; SD =7.9), these teachers had years of teaching experience ranging from 1-20 (M = 11; SD = 5.8).

2.2. Instruments

To gather data on the teacher gender, age, educational attainment and teaching experience, a questionnaire was administered. To collect data on teaching skills, teacher punctuality, teacher enthusiasm, pupil behavior, relation between the teacher and the pupils, the use of textbook, lesson plan, flashcards, supplementary exercises and visual materials, classroom observations were conducted. Details of the observation checklist are presented in **Table 1**.

Teaching skills	Scor
1. Review	
• Review was detailed and meaningful.	2
Review was detailed and meaningful: Review was brief.	1
Teachers did not conduct a review at all.	0
	0
2. Statement of the objective of the lesson	
 Teachers stated the objective of the lesson prior to teaching the new lesson. 	1
• Teachers did not state the objective of the lesson prior to teaching the new lesson.	0
B. Clarity of the presentation	
• Teachers always presented lesson clearly. (Teachers always used flashcards or visual materials).	2
 Sometimes, teachers did not present the lesson clearly. (Sometimes, teachers did not use flashcards or visual r 	
 Presentation of the lesson was always unclear. (Teachers did not use flashcards or visual materials at all). 	0
	0
t. Example	2
• Teachers gave 3 or more words as examples in addition to words in the textbook.	2
• Teachers gave 1 or 2 more words as examples in addition to words in the textbook.	1
• Teachers did not give any extra words as examples aside from those written in the textbook.	0
5. Pupil participation	
 Majority of the pupils participated in the class. 	2
• Only some of the pupils participated in the class.	1
• Only a few of the pupils participated repeatedly in class.	0
6. Practice opportunity	
• Teachers always gave pupils some time for practice after teaching new words.	2
 Teachers arways gave pupils some time for practice after teaching new words. Teachers gave pupils little time for practice after teaching new words. 	1
	1 0
• Teachers did not give pupils any time for practice after teaching new words.	0
7. Question frequency	
 Teachers often asked pupils questions to monitor their understanding of the lesson being taught. 	2
• Teachers sometimes asked pupils questions to monitor their understanding of the lesson being taught.	1
• Teachers rarely or never asked pupils questions to monitor their understanding of the lesson being taught.	0
3. Feedback	
• Teachers gave a directing and encouraging feedback.	2
• Teachers just said that was right and/or that was wrong.	1
• Teachers gave a discouraging feedback to the pupils' incorrect answers.	0
Feacher motivation	Scor
	500
1. Teacher punctuality	
• Teachers started the lesson on time.	2

Table 1. Checklist for the classroom observation	ı
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• Teachers started the lesson less than 5 minutes late.

• Teachers started the lesson 5 or more than 5 minutes late.

1 0

Table 1. Continued

2. Teacher enthusiasm	
Teachers were always enthusiastic.	2
Teachers were sometimes enthusiastic.	1
Teachers were always unenthusiastic.	0
Classroom discipline	Score
1. Pupil behavior	
• Only a minority of the pupils misbehaved.	2
• Some pupils misbehaved.	1
• A majority of the pupils misbehaved.	0
2 Relation between the teacher and the pupils	
• Teachers and pupils always got along nicely.	2
 Teachers and pupils sometimes got tensed. 	1
• Teachers and pupils always got tensed.	0
Instructional materials	Score
1. Use of textbook	
• Teachers used textbook. (Teachers just read the textbook in front of the class).	1
• Teachers did not use textbook. (Teachers did not read the textbook in front of the class).	0
2. Use of lesson plan	
Teachers used lesson plan.	1
Teachers did not use lesson plan.	0
3. Use of flashcard	
• Teachers used flashcards.	1
• Teachers did not use flashcards.	0
4. Use of supplementary exercise	
Teachers used supplementary exercises.	1
Teachers did not use supplementary exercises.	0
5. Use of supplementary exercise	
. Ose of supprementary exercise	
• Teachers used visual materials (real objects or pictures).	1

Variables included in the observation checklist were based on both empirical criteria and the practical situation in Cambodia. In other words, the choice of teaching skills and instructional materials were primarily based on what teachers learned from the Thursday technical meetings.

2.3. Procedures

Data gathering was conducted from mid-May to late June 2000. Prior to the data collection, the researcher, with the request letter issued by the Municipal Office of Education, sought permission and cooperation from the school principals for him to observe two actual classes. It was emphasized to the principals that since the study aimed to gather teacher's teaching skills, motivation, classroom discipline and the use of instructional materials, the classroom observations needed to be done without informing the concerned teachers so that the data gathered would be representative of their regular classroom activities. Upon the school principals' approval, the researcher sat in an unobtrusive location in the classrooms and recorded his observations using the observation checklist presented in Table 1 earlier. The classroom observations were conducted when the teachers were teaching the Khmer language subject.

2.4. Data analysis

Data were analyzed using correlation and stepwise regression analyses. The correlation coefficient was used to determine the relationships between teaching skills and teacher gender, age, educational attainment, teaching experience, teacher punctuality, teacher enthusiasm, pupil behavior, relation between the teacher and the pupils, the teacher's uses of textbook, lesson plan, flashcards, supplementary exercises and visual materials. To determine the joint effects of the variables on teaching skills, a stepwise regression analysis was conducted. Variables that showed significant relationships with teachings skills in the correlation analysis were entered into the stepwise regression analysis. In the analysis, gender was measured as a dummy variable (male = 0; female = 1); while age and teaching experience were measured as interval variables. Educational attainment, punctuality, enthusiasm, pupil behavior, relation between the teacher and the pupils, use of textbook, lesson plan, flashcards, supplementary exercises and visual materials were measured as ordinal variables (Fielding & Gilbert, 2000). Prior to running the statistical tests, scores of teaching skills were manually tallied and measured as an interval variable. Teaching skills of the participants ranged from 3-15 (M = 3.08; SD = 3.40).

3. Results and discussion

As previously stated, the purpose of this study was to examine the influences of teacher characteristics (gender, age, educational attainment and teaching experience), teacher motivation (punctuality and enthusiasm), classroom atmosphere (pupil behavior and relation between the teacher and the pupils) and the use of instructional materials (textbook, lesson plan, flashcards, supplementary exercises, and visual materials) on teaching skills. Results of correlation analysis are presented in **Table 2**.

3.1. Relationship between teacher characteristics and teaching skills

The correlation analysis showed no significant relationship between the educational attainment and teaching experience and teaching skills among the participants in this study (r = -.258, ns; r = .197, ns respectively). The results showed a negative relationship between the teachers' educational attainment and their teaching skills. The relationship, however, was not significant. This finding is understandable

because this study was conducted with first grade teachers teaching the Khmer language subject. The contents of the lessons were only daily vocabulary, short phrases and sentences. Lower secondary school graduate teachers or upper secondary school graduate teachers who were assumed to have a better knowledge of the subject matter should find minimal difficulties in dealing with the lessons covered during the time of observations. The non-significant relationship between educational attainment of teachers and their performance were also found in previous studies (see for instance, Ashton & Crocker, 1987; Fuller, 1987; Darling-Hammond, 2000; Bambico, 2001). According to Darling-Hammond (2000) teacher's knowledge of the materials to be taught was essential to good teaching. However, the development of subject matter expertise slows down after reaching minimal essential level that exceeds the demands of curriculum being taught.

Independent variables	Teaching skills
1. Teacher characteristics	
Gender	.250
Age	.125
Educational attainment	258
Teaching experience	.197
2. Teacher motivation	
Punctuality	.532**
Enthusiasm	.801**
3. Classroom discipline	
Pupil behavior	.695**
Relation between the teacher and the pupils	.612**
4. Instructional materials	
Textbook	435**
Lesson plan	.609**
Flashcard	.725**
Supplementary exercise	.768**
Visual materials	.786**

 Table 2. Correlation between teaching skills and teacher characteristics, teacher motivation, classroom discipline and instructional materials

** *p*< .01

Other studies on teacher effectiveness found that teacher experience affected teaching performance (e.g., Murnane & Phillips, 1981; Fuller, 1987; Greenwald, Hedges & Laine, 1996; Bambico, 2001), but the relationships were not always significant (Darling-Hammond, 2000). Previous studies found that inexperienced teachers were typically less effective than experienced teachers, however, the benefits of experience appeared to level off after about 5 years. This is very much the case for the teachers in the Cambodian primary schools. Based on common observations, more years of experience do not translate into remarkable social and financial benefits for the teachers. In fact, the teachers felt that the longer they worked for the government, the more they were cheated, a perception that is prevalent not only among the teachers but also government employees in other sectors and the general public. This general feeling could be the reason why there was no significant relationship between teaching experience and teaching skills.

Results also showed no significant relationships between teaching skills and teacher gender and age.

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However, it was generally observed that older teachers appeared to display a greater disappointment over the way they were treated by the government. This group also tended to be more indifferent towards the pupils.

3.2. Relationship between teacher motivation and teaching skills

Teacher enthusiasm and punctuality are statistically correlated to teaching skills (r = .532, p < .01; r = .801, p < .01 respectively). The study found that punctual and enthusiastic teachers better prepared their materials and were ready to transact knowledge with the children. During the observations, it was found that punctual and enthusiastic teachers began and finished their lesson on time. They did not waste their time running around collecting teaching materials or asking pupils to take their seats. They were more active as they had a lesson plan or teaching note to guide them although the overall approaches remained teacher-centered. It was also observed that classroom atmosphere of these teachers was conducive for learning. Pupils were guided to participate in the teaching-learning processes, to work together and to get along nicely with the teacher and their classmates. When teaching, enthusiastic teachers spoke empathetically, moved about frequently, humbly gestured, displayed friendly facial expressions with a good sense of humor and did not read lessons from the notes or textbooks. It was obvious that enthusiastic teachers were able to maintain good relationships with their pupils. On their part, the pupils helped teachers create and adapt various teaching activities.

On the other hand, teachers who were tardy and lackadaisical seemed to get mad with the pupils. An important reason for scolding the pupils was their inability to clean the classroom. The teacher's unpleasant words towards pupils were understandable because only after the teachers arrived at the classrooms did they realize that their classes would be observed. For those who conducted the reviews, this group of teachers seemed to have been irritated by the children's inability to remember the previous lessons, and during the lesson, by the children's lack of active participation in the activities assigned by the teachers. It was obvious that classroom atmosphere of the classes of the tardy and less enthusiastic teachers was unpleasant, tensed and frightening, a situation that discouraged cooperative learning.

Strong relationships between teaching skills and teacher enthusiasm found in this study confirmed the results of Lockheed and Verspoor (1994) and Carron and Châu (1996) who, in their review of comparative studies conducted in various countries, found that teachers who displayed greater enthusiasm to teach were more motivated and exhibited more professional attitude towards the pupils, which in turn encouraged pupils to emulate the same behavior. The study found that quality of teachers was not only in terms of instructional quality such as knowledge of subject matter or teaching skills but also non-instructional quality such as professional stability and motivation. This non-instructional quality, to a large extent, determined the competence of the teachers. In their study they found that classes in which the results were better than expected were invariably run by teachers who, for one reason or another, were more motivated than elsewhere.

3.3. Relationship between classroom discipline and teaching skills

The results of the study showed significant relationships between teaching skills and pupil behavior (r = .695, p < .01) and relation between the teacher and the pupils (r = .612, p < .01). This suggests that the classes in which the pupil behavior was instilled properly, teachers could teach more efficiently, thus covering a better range of techniques and materials or vice versa, that is to say, good teaching helped teachers maintain a good classroom discipline. In this study, it was observed that pupils' misbehavior

resulted in significant loss of instructional time and concentration of both the teachers and pupils. The most commonly seen misbehaviors teachers found hard to cope with and interrupt their efforts and concentration in teaching were loud noises and anarchic movements of the pupils from rows to rows either to talk or tease their friends while they were supposed to remain in their seats and to take good heed of teacher's explanation. Similar results were obtained in previous studies by Jones and Jones (1986), Sanford, Emmer and Clements (1983), Doyle (1985), and Walberg (1987) who found that classroom atmosphere was a psychological environment that potentially influenced teaching performances and pupil performances and their achievement.

3.4. Relationship between instructional materials and teaching skills

The results showed strong positive relationships between teaching skills and teachers' uses of lesson plan (r = .609, p < .01), flashcards (r = .725, p < .01), supplementary exercises (r = .768, p < .01) and visual materials (r = .786, p < .01) but a negative significant relationship between the textbooks used by the teachers and teaching skills (r = -.435, p < .01). The observations found that teachers with a lesson plan, flashcards and visual materials (real objects or pictures) could teach the Khmer language subject in a more enjoyable and understandable manner. With flashcards, known as movable characters to Cambodian primary school teachers and pupils, teachers could save a lot of time which they could have wasted in copying words from textbooks onto the blackboards, organize cooperative learning environment, introduce games and other activities that were appealing to first grade children. On the other hand, teachers who did not have flashcards or visual materials always taught using textbooks in a boring manner. What the teachers did with textbooks was to passively transmit knowledge by reading and to ask pupils to repeat after them or their classmates whom teachers assigned to read and to copy words onto the blackboards and had pupils recited aloud and copied into their notebooks later. As for the teachers with flashcards, the use of textbooks was very limited, mainly to show pupils the page numbers for homework. The frequent use of textbooks indicated that teachers lacked preparations. In general, teachers who frequently read the textbooks in front of their pupils tended to be tardy and lazy in teaching and did not apply most of what they learned from the Thursday meetings.

3.5. Factors contributing joint effects to teaching skills

What factors contribute joint effects to the teacher's teaching skills? To answer this question, a stepwise regression analysis was used. In the analysis, only variables that showed significant relationships with teaching skills in the correlation analysis were included. **Table 3** presents the coefficients of different models that resulted from the analysis. When all variables have been entered into the model, four variables -- enthusiasm, the use of visual materials, textbook and pupil behavior -- showed significant effects on teaching skills. The model in this case was:

> Teaching skills = 6.23 (constant) + 1.85 (enthusiasm) + 1.74 (visual material) + -2.38 (textbook) + 1.45 (pupil behavior)

The R^2 value of .809 indicates that only 80 % of the variation could be explained by the variables included in this study. This means that there are other variables other than those included in this study are affecting teaching skills of the participants in this study.

Model		ndardized ficients	Standardized coefficients		
	В	Std. Error	β	t	Sig.
1 (Constant)	3.56	.63		5.63	.000
Enthusiasm	3.97	.48	.80	8.24	.000
2 (Constant)	1.06	.90		1.17	.248
Enthusiasm	2.41	.61	.49	3.94	.000
Visual materials	2.94	.83	.44	3.52	.001
3 (Constant)	5.22	1.94		2.69	.011
Enthusiasm	2.41	.58	.49	4.19	.000
Visual material	2.49	.81	.37	3.10	.004
Textbook	-1.90	.80	20	-2.39	.023
4 (Constant)	6.23	1.82		3.42	.002
Enthusiasm	1.85	.56	.37	3.26	.002
Visual materials	1.74	.79	.26	2.20	.034
Textbook	-2.38	.75	25	-3.15	.003
Pupil behavior	1.45	.52	.29	2.76	.009

 Table 3. Stepwise regression analysis of factors hypothesized to contribute joint effects on teaching skills

4. Implications

While adding to the body of knowledge on factors influencing teaching skills, the results of this study could provide some implications on how to improve the quality of teachers in Cambodia. For one, the non-significant relationship between educational attainment and teaching skills suggests that while efforts may be exerted to upgrade the educational status of teachers, teachers currently serving the primary schools of urban Cambodia, regardless of the number of years spent in schooling, could carry out their teaching responsibilities equally well. In their Thursday meetings, however, some things have to be considered. One is that, from the stepwise regression analysis, enthusiasm, visual materials, textbook, and pupil behavior showed significant joint contribution to teaching skills. However, textbook had a negative contribution. Although textbooks are important tools for teaching, in this study, however, teachers were observed to be just reading them in front of the pupils, thus resulting in boredom. In the Thursday meetings, therefore, aside from focusing on the mastery of the topics and delivering the lessons, effective use of textbooks should be included in the discussions. Improving the moral of these teachers to heighten their enthusiasm, effective use of visual materials, instilling discipline among the pupils should also be given priority in these weekly meetings and in other in-service teacher training programs. In the analysis, along with textbook, enthusiasm, use of visual materials, and pupil behavior showed significantly joint contribution to teaching effectiveness.

More studies, however, need to be done to generate more information about the primary school teachers in Cambodia. For one, the observations were conducted when teachers were teaching the Khmer Language subject. Similar studies focusing on other subjects are suggested.

This study also did not focus on the pupils' performance. Determining the effects of the quality of these teachers on the pupils' achievement should be pursued. Of prime importance is to investigate whether the teachers' quality is a factor in the high rates of repetition prevailing in the Cambodian primary schools (Ministry of Education, Youth and Sports, 1997, 1998 and 1999).

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