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**FACTORS AFFECTING TEACHERS' DECISION TO PARTICIPATE IN
 PROFESSIONAL DEVELOPMENT ACTIVITIES IN PREY TRALACH COMMUNE,
 BATTAMBANG PROVINCE OF CAMBODIA**

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ABSTRACT

The importance of world education for development has made some remarkably progresses in recent years, with international organizations tackle to increase the professional capacity of local teachers and staffs. Students' learning achievement depends very much on teachers' experiences and effectiveness relating to the professional development experiences that support their learning. This study aims to identify teachers' teaching experience characteristics involving in professional learning activities by examining the key factors affecting teachers' decision to participate in the professional development activities (PD). The study addresses two research questions consisting of: 1) How do teachers attend the training programs or PD offered to them based on their characteristics? 2) What are the key factors affecting teachers' decision to get involved in PD or training programs? The research was conducted using quantitative and qualitative methods through directed interviews and survey questionnaires distributed among teachers in person with 103 teachers from 17 schools in commune, namely Prey Tralach by sampling and purposively. The collected data was articulated in descriptive way to show the respondents demographic characteristics such as gender, age, education background, teaching experiences, and grade level of teaching assignment. Logistic Regression was used to analyze to find the key factors affecting teachers' decision to participate in PD activities. The results revealed that the key factors affecting teachers to attend PD activities included teachers' characteristics; teaching grade level of assignments, while external factor; insufficient funding/finance in statistically significant way ($p < 0.05$). PD for teachers is need for professional growth and plays important topic in education improvement in Cambodia.

Keywords: Cambodia; Teachers Professional Development; Teacher Learning; Educational Improving

I. INTRODUCTION

Education sectors play very important role to development nation and society growth. Thus, the developing world has tremendously stridden to access the quality education, particularly in the basic education on the adult learning over the past three decades. With these, although many countries have achieved EFA and MDGs goals, many developing countries however are still far away from basic education and UPE on the adult learning needs (Dy, 2004). Likely, Cambodia is a developing country in Southeast Asia, which has fought to get the quality education since 1980s, yet due to the civil war, called Pol Pot Regime or Khmer Rouge in 1975-1979, Cambodian Education System was destroyed almost all sectors. Cambodian people were nearly 2 million died because of labor force, malnutrition, and massive executives and killed. Ministry of Education, Youth and Sport (MoEYS) showed that about 80% of teachers disappeared during the civil conflict in 1975. Schools, books, and many documents were demolished (Phin, 2014). Comprehensively, Cambodian education reform began in 2000, many children, adults and youths have accessed to school by paying attention from Royal Government of Cambodia (RGC) and developing partners that focused on the basic education for 9 years and try to achieve the education for all goals and quality of education (UNESCO.Cambodia, 2015). According to National Strategies Development



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Plan (NSDP) asserted that RGC has enacted the policies to strengthen the education quality to contribute the economic growth through human capital development. NSDP has made the sector-wide approaches for MoEYS to implement in order to increase the greater equity, enrollment rates of students, especially at primary and basic education levels and to provide them the opportunities to learn with active knowledge to become good and knowledgeable citizens (Royal Government of Cambodia, 2014). To achieve the goals of teacher quality, MoEYS has outlined 9 strategies and 34 sub-strategies. Among nine strategies, one is the provision of in-service training or PD learning for teachers. The promotion of PD values in teaching profession involving with all keys stakeholders both public and external agencies in providing teachers for the professional growth (MoEYS, 2015). The quality of PD training programs has been demonstrated, enacted under the framework of ESP (UNESCO, 2015; MoEYS, 2015). PD can develops teachers with the new content knowledge, teaching strategies, skills, abilities in respectively areas of competencies and application of modern technology in education (Jovanova-Mitkovska, 2010). Consequently, student-learning outcomes needed to have quality of teachers. The qualified teachers lead to get quality education. Thus, MoEYS was provided financial and technical support in developing and finalizing Teachers Policy Action Plan (TPAP) 2015-2020. TPAP addressed that the benefit of PD for teachers, the issue of recruitment, and retention are needed to expend for education quality (Anne Lemaistre, 2016). Moreover, MoEYS has tried to strengthen teachers' capacity, knowledge, and skills for constructing their lifelong learning by offering the opportunities for them engaging in PD activities.

Yet, Education for all Development Index (EDI) showed that Cambodian education is near the bottom quartile among all survey countries. Its education system has faced many issues leading to the insufficient quality and inefficiency in teaching and learning (UNESCO, 2012). Additionally, the lacks of qualified teachers are still the main problems although its education system has been recovered to extend during the rehabilitation period until the present (OECD & EIA, 2008).

Problematically, there are low levels for teachers involving in PD activities or training programs in various way both formal and informal PDs which regarding to a specific school reform, especially in remote and rural area of Cambodia. It is necessary needed to understand the types of PD activities teachers have engaged in order to improve their capacities for better education and student achievement. ESP states that all of novice teachers need to undergo some forms of PD training in the first five years, because it currently does not have the formal provision in providing the in-service training qualifiedly. Additionally, teachers who passed as the certificated or state teachers are trained just only one time, called single PD training at Teacher Training Center/College. Thus, the level of teachers' academy is generally low by both content knowledge and skills. MoEYS has usually approved the available of providing PD programs for teachers. When PD for teachers is driven by curriculum reforms, they are sent to join the short courses to ensure that the new initiative is implemented. In term of teachers' participation in PD activities, this study will be undertake to explore the key factors constrained them involving in any types of PD learning. Based on the outcome of this research, a Conceptual framework was constructed (see Fig.1).

A. Teachers Professional Development

Professional Development is defined as the processes of sustained instructional, individual, and collaborative learning activities, which systematically improves the professional growth of teachers through job embedded process and adult learning-centre, as well on the pedagogical knowledges, capacities, teaching skills, and relation to the pupil outcomes (Evens, Elen, Larmuseau, & Depaepe, 2018; Coldwell, 2017; Al-Behaisi, 2011; Lohman, 2006; Kwakman, 2003). Researchers asserted that PD for teachers is a mixed bag of assorted scheme to fix teachers' inadequate skills or knowledges, and practice new methodologies (Boles & Troen, 2007). There are many types of teachers or staffs development such as in-service training, on the job development,



professional growth and PD programs. TPD and quality teacher is one component processing in education system. The demand of the PD for teachers is to enhance their skills, content knowledge, and pedagogies in teaching and learning (Borko, 2004). High quality of PD affects teachers positively both within and beyond school (Bayar, 2014). Quality of education must support from professional teachers to produce the people who have life skills and strong self-confidence to be competitor among other people in global life (Tanang & Abu, 2014). Teachers become familiar with new teaching methods of their content area, and are aware of new teaching technologies with using tool to adapt teaching practices to diverse students, when they are involved in PD (Lawless & Pellegrino, 2007). Generally, TPD addressed the effectiveness of different approaches to update and upskill teachers of their careers and on teaching professionals.

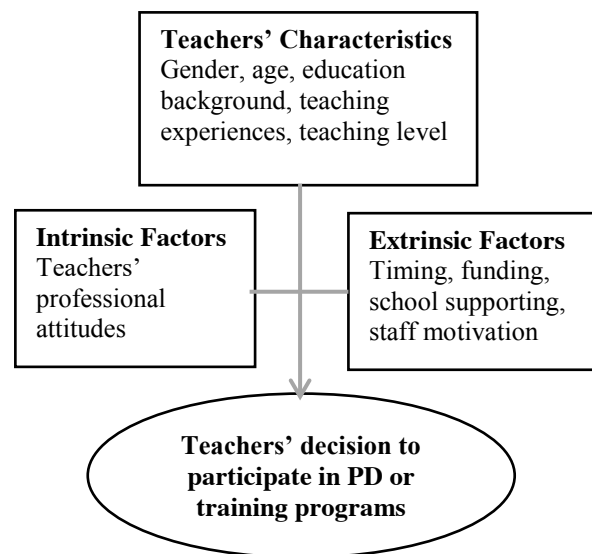


Figure.1: Conceptual framework

II. RESEARCH QUESTIONS

- A. How do teachers attend the training programs or PD offered to them based on their characteristics?
- B. What are the key factors affecting teachers' decision to get involved in PD or training programs?

III. OBJECTIVES

This study intends to

- A. To identify teachers' characteristics participated in professional development activities.
- B. To explore the key factors affecting teachers' decision to attend PD or training programs.

IV. METHODOLOGY

The procedure of this study was a mixed approach, qualitative and quantitative as the survey and field designs. The survey instrument was made based on related conceptualization of theoretical framework in the literatures. The questionnaire was officially written in English, and then translating into Khmer language to make convenient way in distributing among 103 respondent at the target area. This survey was conducted at 17 public schools in Prey Tralach commune, Rukhakiri district, Battambang province of Cambodia in July 2018 in academic years 2017-2018.



A. Research Instruments

The qualitative method was conducted as in-depth interview for descriptive information on PD programs with 6 key informants such administrative staffs, head officer of DoE, head teachers. Quantitative method was used as survey questionnaire with 103 samples of teachers using simple random sampling and purposively. It was divided into three parts as general information on teachers’ characteristics, teachers’ participation in PD activities, and factors affecting. Responding to factors affecting, it is a closed ended question with 34 items consisting of answer choices using Likert scales 1_(strongly disagree), 2_(disagree), 3_(slightly agree), 4_(agree), 5_(extremely agree). There are independent variables and dependent variable as well controlling variables such as gender, age, teaching experiences, education background, and teaching ranking. Independent variables are public school teachers experienced with intrinsic and extrinsic factors. According to the intrinsic factors consisting of teacher professional attitudes measured by mean of 5items, whereas extrinsic factors consisting of 4 scales; timing measured by 3items, funding measured by 6items, school supporting with 3items, and staff motivation measured by 4items. Lastly, the dependent variable is the rate of teachers who have participated in PD training programs. It is coded as 1=Yes (participate in PD), 0=No (not participated).

Regarding to validity and reliability, a survey is also used a pilot tested with the appropriate and convenient samples, then inputting the data entry into SPSS statistics 17.0 to analyze the reliability analysis of the items as scales and found the corresponding of Cronbach’s alpha 0.713. Then, the items, which are violated, need to remove or revise in order to avoid the ambiguity in words of each item/question.

B. Research Hypothesis

- H1:** there is positive relationship between teacher characteristics; gender, age, education background, teaching experiences, teaching ranking and their participation in PD activities.
- H2:** there is positive correlation between teacher professional attitudes and their participation in PD activities.
- H3:** there is positive relationship between timing and teachers attending in PD activities.
- H4:** there is positive relationship between funding and teachers attending in PD activities.
- H5:** there is positive relationship between school supporting and teachers attending in PD activities.
- H6:** there is positive relationship between staff motivation and teachers participating in PD activities

C. Data Analysis

Data was collected and then processing to analyze in SPSS program in descriptive ways and chi-square, correlation, and logistic regression analysis were used. It was used to show the relationship between independents variables and dependent variable as well to explore the main effect of the factors can predict the outcome (dependent variable). Significantly $p < 0.05$ was accounted for the factors to amount of simultaneous regression analysis. Then, regression results highlighted the key factors affecting teachers’ decision to engage in PD training programs.

V. RESULTS

A. Descriptive Analysis

Table 1: Teachers’ participation in PD activities (n=103)

Characteristics	Number	Percent (%)
PD activity participation		
Yes	58	56.3
No	45	43.7
Total	103	100

Mean (SD) 0.56 (0.50); Median (Min; Max)1(0;1)



As shown in Table 1 teachers who attended PD activities in the last 12 months during the academic year 2017-2018, there were 56.3% (n=58), while 43.7% (n=45) of teachers did not participate in any types of PD activities.

Table 2: Descriptive statistic of the mean scales on factors affecting (n=103)

Factors	Min	Max	Mean	SD	Skewness	Kurtosis
Teacher attitudes	1	5	4.19	0.74	-2.49	8.26
Timing	1	5	3.87	0.68	-1.33	3.22
Funding	2	4	3.21	0.45	-0.07	0.54
School supporting	1	5	3.72	0.86	-0.95	0.34
Staff motivation	1	5	3.70	0.68	-0.77	0.95

Synthesized in Table 2 the findings emphasized the descriptive analysis of mean scales on key factors affecting teachers to attend the PD training programs.

Table 3: Correlation between factors and teacher participation in PD activities (n=103)

Factors	Teachers' participation in PD activities
Teacher attitudes	-0.140
Timing	0.067
Funding/finances	0.363**
School supporting	-0.012
Staff motivation	0.070

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

a. Listwise N=103

Table 3 showed the correlation of predicted factors between teachers participation in PD activities was analyzed.

Table 4: Analysis of teacher characteristics across by their participation in PD (n=103)

Characteristics	Participating in PD activities		Mean	SD	X ²	df	p-value
	No Count (%)	Yes Count (%)					
Gender			1.46	0.50	0.34 ^a	1	0.56
Male	23 (22.3)	33 (32.0)					
Female	22 (21.4)	25 (24.3)					
Age			2.89	0.92	3.79	3	0.28
< 20 years	0 (0.0)	0 (0.0)					
20–29 years	21 (20.4)	21 (20.4)					
30–39 years	18 (17.5)	20 (19.4)					
40-49 years	4 (3.9)	11 (10.7)					
> 50 years	2 (1.9)	6 (5.8)					
Education background			3.14	1.18	12.01	4	0.02*
Under high school diploma	5 (4.9)	4 (3.9)					
High school degree	13 (12.6)	20 (19.4)					
Associate Degree	0 (0.0)	1(1.0)					
Bachelor Degree	27 (26.2)	28 (27.2)					
Master Degree	0 (0.0)	5 (4.8)					
Doctor Degree	0 (0.0)	0 (0.0)					
Working experiences			2.63	1.42	5.15	4	0.27



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1 – 5 years	14 (13.6)	15 (14.6)					
6 – 10 years	16 (15.5)	12 (11.7)					
11 – 15 years	5 (4.9)	7 (6.8)					
16 – 20 years	6 (5.8)	14 (13.6)					
>20 years	4 (3.9)	10 (9.7)					
Teaching level			1.58	0.74	9.05 ^a	2	0.01*
Primary school	18 (17.5)	40 (38.8)					
Secondary school	19 (18.4)	11 (10.7)					
High school	8 (7.8)	7 (6.8)					

* $p < 0.05$

Table 4 showed teacher characteristics; according to a chi-square analysis, genders males and females are not significantly different on whether they have participated in PD activities ($X^2=0.34$, $df=1$, $n=103$, $p>0.05$). Thus, there is no different statistically in attending PD activities regardless of genders attained.

To investigate whether on teacher age groups differ from their participation, the findings indicated that teachers have participated in PD programs regardless of their ages. The finding revealed that there is not significantly different between age groups and participation in PD activities ($X^2=3.79$, $df=3$, $n=103$, $p>0.05$). Thus, there is no association between teachers' age group and PD participation of teachers.

Responding to teachers' education background, findings indicated that 27.2% of teachers' participation in total (56.3%) with bachelor degree proved more willing to participate in PD activities, followed by 19.4% of teachers with high school degree. Whereas, teachers who are holding master degree 4.8% and 3.9% of teachers are under high school diploma, while teachers with associate degree 1.0% have participated in PD activities. The findings emphasized that teachers' education are statistically significant on their participation in PD activities ($X^2=12.01$, $df=4$, $n=103$, $p<0.05$). This showed that teachers' education correlated to PD participation and the effect size of contingency coefficient is 0.248, which considered as low association between education background and participation in PD activities according to Cohen, (1988).

Regarding to teaching experiences, chi-square emphasized that there was not statistically significant ($X^2=5.15$, $df=4$, $n=103$, $p>0.05$). Thus, teachers have participated in PD activities regardless of their teaching experiences. To investigate whether teachers' level of teaching assignment differ on whether their participation in PD activities or not, a Chi-square statistical analysis was used. Data indicated that the teaching level was statistical significantly different on teachers participated in PD activities ($X^2=9.05$, $df=2$, $n=103$, $p<0.05$). Based on the result, 38.8% of primary school teachers have attended greater than other group of secondary school teachers 10.7% and upper secondary teachers 6.8%. Therefore, there is association between teachers' grade level of teaching assignments and teachers' participation PD activities with the effect size of coefficient is 0.296, which considered as low relationship according to Cohen, (1988). Thus, teachers' teaching grade assignment is influence on their participation in PD activities.

B. Regression Results

Firstly, the correlation of predicted factors and statistically significant of teachers' characteristics were analyzed (see Table 3 and 4). Next, logistic regression results was analyzed to examine the key factors affecting or influencing teacher' participation in PD activities after controlling teacher education, teaching rank (dummy variables) and intrinsic as well as extrinsic factors. Regression analysis was conducted to assert the extent of which factors affecting and can predict the outcome.



Table 5: Regression results of teachers' participation in PD activities on factors affecting coefficients

Predicted Factors	B	S.E.	Exp(B)	Sig.	95% C.I. for Ex(B)	
					Lower	Upper
Education	0.396	0.221	1.485	0.073	0.964	2.289
Teaching rank	-0.741	0.358	0.477	0.038*	0.236	0.962
Teacher professional attitudes	-0.926	0.501	0.396	0.065	0.148	1.058
Timing	0.366	0.487	1.442	0.453	0.555	3.745
Funding/finance	1.939	0.613	6.951	0.002**	02.092	23.088
Principal influence	-0.255	0.296	0.775	0.389	0.434	1.384
Staffs' motivation	0.164	0.444	1.178	0.712	0.494	2.809
Constant	-3.166	2.500	0.042	0.205		

a. Variable(s) entered on step 1: q1.4, q1.6, TaF1, TimeF2, MoF3, ScF4, SF5,

Dependent variable: participation in PD activities, 0= no; 1=yes

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

In Table 5, the finding showed that two of seven variables remain statistically significant ($p < 0.05$). According to the logistic regression, the Omnibus Tests of Model Coefficients ($X^2 = 25.637$, $df = 7$, $n = 103$, $p < 0.05$), the -2 Log likelihood is 115.506a; Cox & Snell R Square is 0.220; and Nagelkerke R Square is 0.295. It means that approximately 22.0% to 29.5% of the variances in predicting the PD activities participated by teachers. Whereas, the model predicted the overall percentage is 68.9% in the Classification Table^a.

It is very interesting to notice that teaching grade level of assignment is the factor predicted negatively to teachers' participation in PD programs or activities ($\beta = -0.741$, $p < 0.05$). In another word, it is expected that while teaching rank increases by one unit, the rate of teachers attending in PD activities decrease by 0.741. This factor is strong negative affecting teachers to participate in any types of PD activities.

Lastly, teachers attending in any types of PD programs are statistically significant correlation to funding/finance attained. This is the strongest positively relationship to the outcome (teacher participation in PD activities) ($\beta = 1.939$, $p < 0.01$). When funding are available and supported, teachers are more likely to attend. In the other words, when the funding/finances are supported for teachers to attend PD programs increase by one unit, the amount of their participation in PD activities are expected to increase by 1.939 respectively. Consequently, teaching level and supporting funds/finances are the key factors affecting teachers' decision to participate in PD training programs.

VI. DISCUSSION AND CONCLUSION

This study synthesized the importance of PD activities or training programs as the theoretical conceptualization in learning and teaching growth. Based on the survey results, teachers who have participated in PD activities are 56.3% out of 103 teacher samples who are working at public schools in Prey Tralach commune, Battambang province of Cambodia in the academic year 2017-2018. The results indicated that teachers who are holding bachelor degrees aged more than 25 years old to 39 years old with teaching experiences from five to ten years are more likely to participate in PD activities greater than the other degrees. Consequently, teaching level and funding are the key factors affecting teachers to participate in PD or training programs. As the results, teaching level is negatively strong correlation to teacher participation in PD activities. Based on some of the previous studies regarding to teachers' characteristics it was contrary to this study. According to Torff & Sessions, (2008) found that years of teaching experiences and teaching grade level were the factors affecting teachers to attend the PD activities. While Ozer & Beycioglu, (2010) found that



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teaching year experiences and gender were the factors affecting teachers to participate in PD activities. Accordingly, Bayindir, (2009) found negatively teaching year experiences affected teachers attending the PD activities. When the teaching experiences increased, teachers participated in PD decreased dramatically. Meanwhile, he asserted that teachers were over 20 years of teaching experiences think that PD was not necessary and loss of time for them.

Nevertheless, this finding was consistent with the result of Torff and Sessions who found that teaching level of assignment affected teachers to attend PD training programs. Responding to funding/finance, Lohman (2006) found that insufficient fund was the factors affecting teachers to engage in PD activities. Shafer also found the insufficient funding affecting teachers to engage in PD training programs (Shafer, 2008). This finding was consistent with Lohman and Shafer regarding to funding/finances.

VII. LIMITATION AND IMPLICATION

The limitation of this study is due to the period, and budget allowances, which was conducted at state schools in only one commune located in rural area of Cambodia. It is failure to study the entire province of the region. Hence, it is limited in depth of generalized information PD for teachers and their participation.

It was implicated for future researches that;

- 1). It should be conducted in the entire district or province in depth study to better understand generalization of the reality related to PD training programs in Cambodia and the views of the key factors affecting teacher participation.
- 2). There is a need for a research concerning to the application of the content knowledge, skills, and teaching pedagogies through PD training programs. It may benefit for participants after attending it and may shed a light on the practices of PD activities to address the real value for teachers.

REFERENCES

- Al-Behaisi, S. (2011). The Impact of Professional Development on Teacher Practices and Teaching Efficacy.
- Anne Lemaistre. (2016). Unesco in Cambodia today Report 2014-2015.
- Bayar, A. (2014). The Components of Effective Professional Development Activities in terms of Teachers' Perspective, 6(2), 319–327.
- Bayindir, N. (2009). Teachers' perception levels of activities directed towards professional progress. *Education*, 130(1), p22-29.
- Boles, K. C., & Troen, V. (2007). How to Improve Professional Practice. In *Principal* (p. 50).
- Borko, H. (2004). Professional Development and Teacher Learning : Mapping the Terrain. *American Education Research Association*, 33(8), 3–15.
- Coldwell, M. (2017). Exploring the influence of professional development on teacher careers: A path model approach. *Teaching and Teacher Education*, 61, 189–198.
- Evens, M., Elen, J., Larmuseau, C., & Depaepe, F. (2018). Promoting the development of teacher professional knowledge: Integrating content and pedagogy in teacher education. *Teaching and Teacher Education*, 75, 244–258.
- Jovanova-Mitkovska, S. (2010). The need of continuous professional teacher development. *Procedia - Social and Behavioral Sciences*, 2(2), 2921–2926.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19(2), 149–170.
- Lawless, K. A., & Pellegrino, J. W. (2007). Professional Development in Integrating Technology Into Teaching and Learning: Knowns, Unknowns, and Ways to Pursue Better Questions and Answers. *Review of Educational Research*, 77(4), 575–614.
- Lohman, M. C. (2006). Factors influencing teachers' engagement in informal learning activities.



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*A Transformative Community:
Asia in Dynamism, Innovation, and Globalization*



- Journal of Workplace Learning, 18(3), 141–156.
- MoEYS. (2016). Public Education Statistics & Indicators (Vol. 2017).
- MoEYS, T. (2015). Teeacheer Policy Action Plan.
- Ozer, N., & Beycioglu, K. (2010). The relationship between teacher professional development and burnout. *Procedia - Social and Behavioral Sciences*, 2(2), 4928–4932.
- OECD, & EIA. (2008). Executive summary. *New Directions for Youth Development*, 2008(120), 7–12.
- Phin, C. (2014). Challenges of Cambodian Teachers in Contributing to Human and Social Development: Are They Well-Trained? *International Journal of Social Science and Humanity*, 4(5), 344–348.
- Royal Government of Cambodia. (2014). National Strategic Development Plan 2014-2018.
- Dy, S. S. (2004). Strategies and Policies for Basic Educaiton in Cambodia: Historical Perspective. *International Education Journal*, 5(1), 90–94.
- Shafer, F. K. (2008). An investigation of selected factors that influence middle-level teachers' professional development choices.
- Tanang, H., & Abu, B. (2014). Teacher Professionalism and Professional Development Practices in South Sulawesi , Indonesia, 3(2), 25–42.
- Torff, B., & Sessions, D. (2008). Factors associated with teachers' attitudes about professional development. *Teacher Education Quarterly*, 35(2), 123–133.
- UNESCO.Cambodia. (2015). Cambodia Education for All 2015 National Review Royal Government of Cambodia National Education For All Committee The National Education For All 2015 Review Report.
- UNESCO. (2012). Education for All: Youth and skills: Putting education to work. EFA Global Monitoring Report.
- UNESCO. (2015). Education 2030. World Education Forum 2015.