The Effect of School Culture on the Management of Professional Development in Secondary Schools in Malaysia

Parwazalam Abdul Rauf [1], Syed Kamaruzaman Syed Ali [2], Aliza Aluwi [3], Nor Afizah Mohd Noor [4]

[1] Social Studies Department
IPG Kampus Ilmu Khas

[2] syed@um.edu.my
Faculty of Education
University of Malaya

[3] English Department
IPG Kampus Ilmu Khas

[4] Mathematics Department
IPG Kampus Bahasa Melayu

ABSTRACT

This study explores the influence of school culture on the management of professional development in secondary schools in Malaysia. It illustrates how school culture influences the school professional development management. The instrument used in this study is a self-administered questionnaire involving 515 secondary school teachers. The results of the study reveal that school culture correlates with the management of professional development and found that two out of five (40%) constructs of school culture influence the school professional development management. This finding shows that only two constructs of school culture, namely collective efficacy and communication, can become predictors of the management of professional development in schools. This study has clearly shown the importance of school culture to management of professional development in secondary schools. As for the contribution to the body of knowledge, this study has introduced a new construct, identified as Total Evaluation, to evaluate the management for professional development. This will help improve the existing measurement currently used.

Keywords: *School Culture, Management, Professional Development*

INTRODUCTION

Statement of the Problem

The main rationale for the transformation of education in Malaysia is to increase student achievement and to upgrade teacher skills and knowledge. In terms of the allocation for education, Malaysia is among the countries having a substantial budget allocation for education as reported by UNESCO (2012). Table 1 shows the comparison between some countries. Table 1 on the comparison between educational budget among countries shows Malaysia allocates twenty-five percent of her total budget to education. This figure far exceeded the budget allocation for education in developed countries such as the United States (14%), United Kingdom (12%) and Japan (9%).

Table 1: Percentage of Education Allocation for A Few Countries

Countries	Percentage Education Expenditure as Compare to Government Expenditure (%)
Thailand	25
Malaysia	25
Cuba	17
New Zealand	15
USA	14
United	12
Japan	9

Source: UNESCO; 2012

In terms of the percentage of allocation for education as compared to Gross National Product (GNP), Malaysia's allocation for education is 5.7 per cent of GDP. This percentage is higher than the 4.8 per cent set by the World Bank. Compared to others countries, Malaysia ranks third after New Zealand (7.3%) and Canada (6.9%) and much higher in terms of percentage in GDP compared to developed countries such as Japan (3.6%), the United States (5.4%) and United Kingdom (5.3%). This statistic is shown in Table 2.

Table 2: Percentage of Education Expenditure Compare to GNP (2010)

Countries	Education Expenditure As Compare to GNP (%)
New Zealand	7.3
Canada	6.9
Malaysia	5.7
Australia	5.5
USA	5.4
United Kingdom	5.3
South Korea	3.7
Japan	3.6
India	3.2
Singapore	3.0
China	2.3
World	4.8

Source: World Bank (2010)

In addition to the above allocation of resources to education in general, the Malaysian Ministry of Education also allocates money to upgrade teachers' knowledge and ability under the "In-Service Professional Development for Teachers" provision. This special allocation, shown in Table 3, had increased from MR76 million, in 2008, to MR132 million, in 2010.

Table 3: Total Provision for In-Service Professional Development for Teachers' From 2008-2010

Year	Total Provision (MR)
2008	76,232,840.00
2009	86,457,789.00
2010	132,545,763.00

Source: Ministry of Education, Malaysia

The main purpose of this huge allocation for education is to boost or to upgrade teachers' knowledge and capabilities because in an education reform, "… it must not be forgotten where the ultimate power to change is and always has been – in the heads, hands, and hearts of the educators who work in our schools. True reform must go where the action is" (Sirotnik, 1989, p. 109). This idea Sirotnik put forward is still pertinent in today's education landscape and corroborated by others (Lieberman & Miller, 2001). Therefore, if the education system is to be reformed, the teachers are the key components.

Does this huge allocation for education and teachers' professional development upgrade teachers' knowledge and simultaneously improve students' achievement in Malaysia? A study by Motoko et al. (2007) ranked Malaysian Mathematics and Science teachers' quality 31 out of 47 countries. This study showed that despite the increased budget allocation for education, teacher' quality is still debatable. Besides that, the Teaching and Learning International Survey (TALIS) (2009) found that only 17 per cent of Malaysian teachers were really satisfied with the professional development program conducted by their

school managements. This figure showed that despite investing millions of ringgits to improve teacher professional development in Malaysia, the outcome was still disappointing. This provides the opportunity for researchers to conduct studies related to teacher professional development in Malaysia.

Bunch (2007) suggested that the main reason professional development or training has failed to upgrade staff knowledge was that organization culture has been ignored. He posed this question:

"How often, for example, do practitioners conduct training to foster independent thinking only to send the trainee back to an autocratic manager?" (Bunch, p.146)

In the United States, USD200 billion has been spent on training and development. However, much of the investment appeared squandered on 'ill-conceived or poorly implemented interventions' (Bunch, 2007).

Sullivan (2010), in his doctoral research found that school culture did influence teachers' attitudes toward the Professional Development Plan (TAPDP). His findings showed that, statistically, teachers' attitudes towards TAPDP correlated positively with the five factors of school culture: Collaborative Leadership, Teacher Collaboration, Professional Development, Unity of Purpose, and Collegial Support. However, the correlation was too weak with r values ranging from .09 (Collegial Support) to .21 (Professional Development) suggesting small effect sizes or weak relationship with TAPDP.

In short, based on the above research findings, the research questions for this study are:

a) Does school culture influence the management of professional development in schools?
b) Which of the school culture dimensions can be predictors for this relationship?

Literature Review

Based on the above research questions, this study probed the literature related to the management of professional development in schools and its relationship with school culture.

School Professional Development Management

The term *professional development* is often used interchangeably with the terms *professional learning*, *teacher learning*, *professional growth*, and *staff development*. To ease the problem of repetition these terms will be used interchangeably in this study. Guskey (2000) defined professional development as "those processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students. In some cases, it also involves learning how to redesign educational structures and cultures" (p.16). The National Foundation for the Improvement of Education (1996) stated that "the goal of professional development for teachers is to increase student learning" (p. xiii). Recently a new paradigm of professional development has emerged. The tradition of the one-day off-site "one-size fits all" training is being slowly replaced by professional development that takes place over a long duration (Garet et al., 2001) and incorporates research on what is known about how people learn (Bransford, Brown, & Cocking, 2000), and is situated within the teacher's workplace, that is the school (McLaughlin & Talbert, 2006).

The 2009 report titled "Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad" (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009) asserted that although research is growing on the characteristics of effective professional development, many teachers are not experiencing high quality professional development. The report further stated that, "Effective professional development is intensive, on-going, and connected to practice; focuses on the teaching and learning of specific academic content; is connected to other school initiatives; and builds strong working relationships among teachers" (p. 5). If a professional teacher is expected to be a career-long learner to be effective with students (Fullan, 1993; Wise, 1996), then the school must be the place where teachers engage in effective ongoing professional learning. Barth (2001) shared:

"I believe that schools can become much more than places where there are big people who are

learned and little people who are learners. They can become cultures where youngsters are discovering the job, the difficulty, and the excitement of learning and where adults are continually rediscovering the joy, the difficulty, and the excitement of learning. Places where we are all in it together – learning by heart". (p. 29)

Relationship between School Culture and School Professional Development Management

According to Deal (2009), the following are the characteristics of School Culture:

a.   Shared values and a consensus on "how we get things done around here".
b.   The principal as a hero or heroine who embodies core values
c.   Distinctive rituals that embody widely shared beliefs.
d.   Employees as situational heroes or heroines.
e.   Rituals of acculturation and cultural renewal.
f.   Significant rituals to celebrate and transform core values.
g.   Balance between innovation and tradition and between autonomy and control.
h.   Widespread participation in cultural rituals

(Deal, 2009)

School Culture (SC) is a belief that is strongly shared and widely enacted (Hoy & Miskel, 2008) by a particular school community. Hoy and Miskel (2008) also pointed out that the contemporary research on SC is sparse. Most of the research on SC focused more on corporate or organizational culture in general. For example, Bunch (2007) related that "organizational culture" may lead to failure of training. Sullivan (2010) found out that SC does have a relationship with teachers' attitude toward school professional development planning. However, his study found that the relationship was weak. Lack of research on SC and professional development was confirmed by Avalos (2011) and only six related articles have been produced from 2000 to 2010. In Malaysia, the research on SC is similarly minimal. Most of the research on SC in Malaysia is more psychological in nature.

Research by Chang et al. (2011) found that group cohesiveness (GC), which is one of the characteristics of SC in Deal's (2009) definition, is related to innovation in professional development (r = .535 or 30 per cent). Based on the above finding, the following hypotheses are formulated:

H1:   The correlation between school culture and the management of professional development in schools is not significant.

H2:   School culture elements (collective efficacy, faculty trust, academic optimism, pupil control and communication) are not the predictors for School Professional Development Management (SPDM)

In general, organizational culture has been said to affect organizational effectiveness (Deal & Kennedy, 2009). The proposed framework could probably shed some light as to whether school culture could also have similar impact on the SPDM. It is interesting to examine the dimensions of school culture in the secondary school in Malaysia as past research activities were mainly focused on business organizations and were conducted in the West.

Conceptual Framework

Following the literature review, a theoretical concept for this research could be drawn as in Figure 1. It shows the relationship between the independent variable (SC) and dependent variable (SPDM). The independent variable contains 5 constructs, which are Efficacy Culture, Trust Culture, Academic Optimism, Control and Communication, while the dependent variable contains 6, which are Readiness, Planning, Training, Implementation, Maintenance and Total Evaluation (new construct). The diagram also clearly illustrates the purpose of the research, that is, to find out how far SC influences SPDM and to clearly identify the SC construct that becomes a factor in this relationship. The main source of this framework is from the theory of effective professional development and school culture.
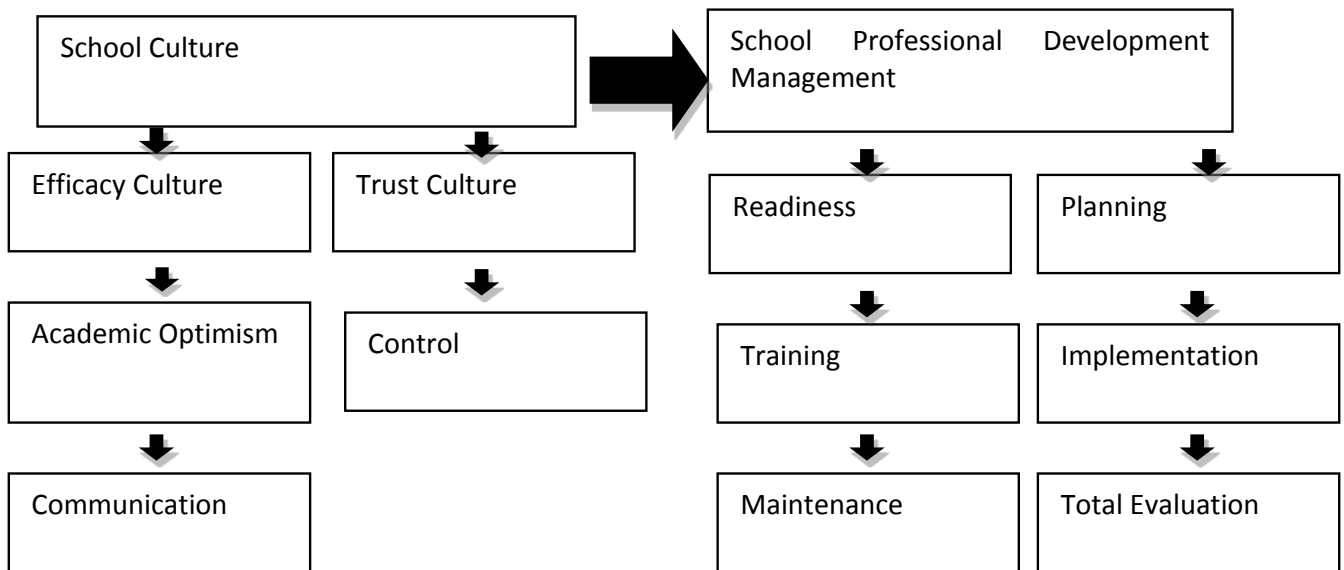
School Culture		School Professional Development Management	
Efficacy Culture	Trust Culture	Readiness	Planning
Academic Optimism	Control	Training	Implementation
Communication		Maintenance	Total Evaluation

Figure 1. Conceptual Framework for the study.

METHOD

Participants

A total of 560 questionnaires were distributed, based on random sampling, and 515 questionnaires were returned. All were found to be usable, yielding a 92% response rate. The instrument used in this study was a self-administered questionnaire involving teachers in secondary schools in Selangor, a state in Malaysia. Prior to the administration of the questionnaire, rapport was developed with the respondents by explaining the importance and the relevance of the study. The subjects were assured that their responses would be kept confidential and would be utilized only for research purposes. They were asked to fill in the questionnaire according to the instructions written on the top of the questionnaire.

Measures

In this study, the survey questionnaire consisted of two sections. The first section, SC, was measured by thirty-five items developed based on SC literature (Hoy, 2008). Originally the questionnaire consisted of four constructs: Collective Efficacy, Faculty Trust, Academic Optimism, and Pupil Control. However, to satisfy the needs, include an element of, and to add a value of Malaysian culture, the researchers included one more construct that is Communication.

The second section of the SPDM consisted of forty-six items developed based on the RPTIM model literature (Woods, Thompson, & Russell, 1981). RPTIM model consisted of five constructs; Readiness, Planning, Training, Implementation and Maintenance. The researchers have included one more construct, that is: Total Evaluation (Te). In short, for the purpose of this study, the RPTIMTe model was adopted. The items in this section used the 6-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (6) and section two used a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5).

Total Evaluation

As part of our contribution to the body of knowledge is the measurement of construct for total evaluation. This construct is based on the Theory of Total Quality Management (TQM) and Kirkpatrick's evaluation model and to evaluate how efficient is the school professional development management. It consists of 5 items involving financing, personnel and resources.

Data analysis

The Statistical Package for the Social Sciences (SPSS) version 22.0 was used to analyze the data collected. First, a reliability analysis was performed to determine the instrument reliability. The Cronbach alpha (α) was used to determine the internal consistency of the instrument. All the items in the instruments were within the acceptable standard of reliability (> .67), indicating that items in the instruments had met the acceptable standard of reliability analysis (Nunally & Bernstein, 1994). Analysis of variance (ANOVA), Pearson correlation (*r*) analysis and descriptive statistics were conducted to analyze the constructs and the usefulness of the data set (Tabachnick et al., 2001; Yaacob, 2008). Finally, stepwise regression analysis was utilized to test the magnitude and nature of the relationship between independent variables and one dependent variable (Baron & Kenny, 1986).

Results

Table 4 shows that most of the respondents were female (54.5%, and 44% male respondents). In terms of length of service in the teaching profession, 28% of the respondents have between 6 to 10 years' experience in the teaching service.

Table 4: Respondent characteristics (N=515)

Gender (%)	Length of Service (%)	
Male = 44	< 5yr	= 25
Female = 56	> 6yr but <11 yrs	= 25
	>11yrs but <16 yrs	= 28
	>16yrs but <21yrs	= 13
	>21yrs	= 9

Table 5 shows the reliability of the research instrument. The SC original survey questionnaire consisted of 35 items with five constructs, namely, Collective Efficacy (8 items), Faculty Trust (8 items), Academic Optimism (8 items), Pupil Control (7 items) and Communication (4 items). As for the SPDM survey, originally, it had 38 items with five constructs, that is, Readiness (8 items), Planning (11 items), Training (9 items), Implementation (6 items) and Maintenance (4 items). To these, the researchers added one more construct on Total evaluation (8 items). With the new construct the SPDM instrument then consisted of 42 items with 6 constructs. Based on the reliability analysis, the items in both instruments SC and SPDM variables were maintained as the items were within the acceptable standard of reliability.

Table 5: The Results of Reliability Analysis for Research Instrument

Components in SC & SPDM (items)	Alpha for SC	Alpha for SPDM	Decision
Collective Efficacy (8)	.678		Accepted
Faculty Trust (8)	.888		Accepted
Academic Optimism (8)	.842		Accepted
Control (7)	.688		Accepted
Communication (4)	.878		Accepted
Readiness (8)		.836	Accepted
Planning (11)		.892	Accepted
Training (9)		.758	Accepted
Implementation (6)		.821	Accepted
Maintenance (4)		.816	Accepted
Total Evaluation (8)		.874	Accepted

Table 6 shows the results of the Pearson correlation analysis and descriptive statistics. The correlation coefficients for the relationship between the independent variable (school culture) and the dependent variable (SPDM) were less than .90, indicating that the data were not affected by serious collinearity problem (Hair et al., 1998). The null H1 hypothesis is rejected. It shows that school culture does have an influence or positive correlation with SPDM.

Table 6: Pearson Correlation Analysis and Descriptive Statistics

Variable	Mean	Standard Deviation	Pearson Correlation Analysis	
			SC	SPDM
School Culture	3.65	0.63	1	.515**
SPDM	3.46	0.48	.515**	1

Note. Significant at **$p < .01$

Table 7 shows the results of the multiple regressions for SC predictors and SPDM. Based on the analysis, two out of five constructs refer to SC, namely collective efficacy and communication, which are the predictors of SPDM. Table 7 shows clearly that only two constructs of SC (Collective Efficacy and Communication) have significant influence on SPDM. The adjusted R^2 value (0.305) indicates that the influence of SC on SPDM is 30.5%. The Communication construct is the main predictor factor which contributes 30.2% (β=0.292, p=0.001). Whilst the second predictor, Collective Efficacy, contributes 28.6 % (β = 0.278, *p* = 0.001 in influencing teachers' attitude toward SPDM. With this finding the H2 is rejected. Hence, statistically SC does have an influence on SPDM.

Table 7: Multiple Regression Analysis on SC Variables Predicting SPDM

IV (SC)	B	Beta (β)	*t*-value	p	R^2	ΔR^2
CE	0.205	0.292	3.783	0.001**	0.287[a]	0.286
COM	0.278	0.278	3.604	0.001**	0.305[b]	0.302
Constance	1.963		19.261	0.001*		

Note.   CE – Collective Efficacy
        COM - Communication
Note.   Significant at **$p < .01$

DISCUSSION AND IMPLICATIONS

Research on the influence of organizational and school culture on professional development in the Malaysian context is relatively scarce. Most researches on professional development were conducted to determine its effectiveness but, very little research has been done to gauge the influence of school culture on professional development. The findings in this study may contribute to the body of knowledge on the application of school culture in the Asian context in particular as most of the studies on school culture have been carried out in the U.S. context (Pascal, 2009). This study has found that when teachers perceive their school culture as positive, they are more likely to have positive attitudes toward the Management of Professional Development in Schools. This was shown by the result of Pearson correlation between SC and SPDM.

Therefore, an understanding of whether behavioural theories formulated in the United States can be generalized to non-U.S. population is critical to the effective management of global ventures (Hofstede, 1980). The study found that, statistically, school culture does have an influence on the management of

professional development in schools. This finding is consistent with previous studies by Sullivan (2010) in one of the schools in the USA. Sullivan (2010) found that school culture does influence teachers' attitude on professional development planning. This is also consistent with the conceptual paper presented by Bunch (2007) that organizational culture does influence professional development. Furthermore, Bunch (2007) postulated that professional development would be in vain if organization culture is ignored or if it is unable to make any changes to organizational culture.

CONCLUSION

The findings of this study confirmed that school culture does influence the management of professional development in schools positively. Therefore, practitioners need to consider the link between school culture and SPDM to ensure positive outcomes from professional development initiatives. This will lead to school effectiveness based on improved student achievement as well as teachers' satisfaction (Hoy & Miskel, 2008).

There are several limitations in this study. Due to time and financial constraints, as well as the small sample, the results of this study cannot be generalized. One should be cautious about generalizing the statistical results and applying it to other states in Malaysia. This study sets a foundation for further research on relationship between school culture and SPDM. This study used a cross-sectional research design where the data were collected once within the duration of this study. In this sense, this research design did not capture the developmental issues (e.g., intra-individual change and restrictions of making inference to participants) and/or causal connection between variables of interest. It only examined the relationship between latent variables (i.e., school culture and overall SPDM) and this study did not specifically examine the influence of a particular model of professional development on teachers' instructional practices.

The finding suggests that teachers should be encouraged by their Principals to work collaboratively on SPDMs. Through collegial dialogue, teachers can learn with and from each other as they pursue their professional development goals. It also stood to reason that teachers would feel an ingoing accountability to the peer or group of peers to not "drop the ball" on the SPDM. Working with a colleague or group on a regular basis would also encourage reflection, a vital part of the professional development process. As more and more teachers work collaboratively, a more collaborative school culture may grow. Collaborative cultures are not just beneficial for teacher learning; they have also been shown to positively affect student achievement.

RECOMMENDATIONS FOR FUTURE RESEARCH

Based on the findings of this study on the Management of Professional Development in Schools, as well as a review of related literature, the following are recommended for future research:

* This study examined the influence of culture on teachers' attitudes toward the Management of Professional Development in Schools. The study found that some teachers had positive attitudes and that these attitudes were influenced by school culture. This study did not examine the impact of SPDM on student learning. One should not assume or infer that a teacher's positive attitude toward the SPDM is positively related to student learning. Since the ultimate goal of conducting professional development for teachers is student learning, hence this is a critical aspect for future researchers to work on.

* Future research projects could employ a qualitative method in order to have an in-depth look at the SPDM. One example is an ethnographic study of the teachers' experience working on an individual PDP and collaborative PDP. Furthermore, future research could be designed to examine the effect of PDP on students' learning. By looking closely at these teachers' experiences, one could gain insights on how to improve the PDP process so that more teachers will benefit from successful management of PDP. Similarly, an in-depth focus on several administrators navigating the PDP process would be informative.

REFERENCES

Akiba, M., LeTendre, G. K., & Scribner, J. P. (2007). Teacher quality, opportunity gap, and Achievement gap in 47 countries. *Educational Researcher, 36*(7), 369-387.

Ashton, P. T., & Webb, R. B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement*. New York, NY: Longman.

Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education, 27*, 10-20.

Baron, R. M., & Kenny, D. A. (1986). This moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.

Barth, R. S. (2001). *Learning by heart*. San Francisco, CA: Jossey-Bass.

Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, *33*(8), 3-15. doi:10.3102/0013189X033008003

Bransford, J., Darling-Hammond, L., & LePage, P. (2005). Introduction. In L. Darling-Hammond & J. Bransford (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 1-139). San Francisco, CA: Jossey-Bass.

Bunch, K. J. (2007). Training failure as a consequence of organizational culture. *Human Resource Development Review*, *6*(2), 142-163.

Chong, J. C., Yeh, M. Y., Chen, C. S., Hsiao, C. H. (2011). Taiwanese technical education teachers' professional development: An examination of some critical factors. *Teaching and Teacher Education*, *27*, 165-173.

Chong, L. K. (2008). *Falsasah dan pendidikan di Malaysia.* Kuala Lumpur, Malaysia: Kumpulan Budiman.

Cochran-Smith, M. (2005). 2005 Presidential Address: The New Teacher Education: For Better or for Worse? *Educational Researcher*, *34*, 3-17. doi:10.3102/0013189X034007003

Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, *8*(1). Retrieved from http://epaa.asu.edu/epaa/v8n1

Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad.* National Staff Development Council and School Redesign Network at Stanford University. Retrieved from http://www.srnleads.org/resources/publications/pdf/nsdc_profdev_short_report.pdf

Deal, T. E. (2008). *Making sense of social network in schools*. American Association of School Administration.

Fullan, M. (1993). Why teachers must become change agents. *Educational Leadership, 50*(6), 12-17.

Fullan, M. (2007). Educational reform as continuous improvement. In W. D. Hawley (Ed.), *The keys to effective schools: Educational reform as continuous improvement* (2nd ed., pp. 1-12). Thousand Oaks, CA: Corwin Press.

Fullan, M., & Hargreaves, A. (1992). *Teacher development and educational change* London, UK: Falmer Press.

Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.

Hargreaves, A. (2000). Four Ages of Professionalism and Professional Learning. *Teachers and Teaching, 6,* 151-182. DOI 10.1080/713698714

Hawley, W. D., & Valli, L. (1999). The essentials of effective professional development: A new consensus. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the* 247 *learning profession: Handbook of policy and practice* (pp. 127-150). San Francisco, CA: Jossey-Bass

Hofstede, G. H. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

Hoy, W. K., & Miskel, C. G. (2008). *Educational administration: Theory, research, & practice.* New York, NY: McGraw-Hill.

Lieberman, A., & Miller, L. (1999). *Teachers: Transforming their world and their work.* New York, NY: Teachers College Press.

Lieberman, A., & Miller, L. (2001). Introduction. In A. Lieberman & L. Miller (Eds.), *Teachers caught in the action: Professional development that matters* (pp. vii-x). New York, NY: Teachers College Press.

Ministry of Education, Malaysia. (2006). *Education Development Blueprint.* Percetakan Negara.

Ministry of Education, Malaysia. (2008). *Official Letter on Expenditure For In-Service Teachers' Under The Ministry of Education of Malaysia*. National Publication.

Ministry of Education Malaysia. (2009). *Malaysian Teacher Standard.* Putrajaya, Malaysia: Author.

Neville, K. S., & Robinson, C. J. (2003). *The Delivery, Financing, and Assessment of Professional Development in Education: Pre-Service Preparation and In-service Training.* New York, NY: The Finance Project. Retrieved from http://www.financeproject.org/Publications/prof%20dev%2011-2-03.pdf

National Board for Professional Teaching Standards. (2002). *What teachers should know and be able to do: National Board for Professional Teaching Standards*. Retrieved from http://www.nbpts.org/UserFiles/File/what_teachers.pdf

National Commission on Teaching & America's Future. (1996a). *What matters most: Teaching for America's future*. New York: Author.

National Commission on Teaching & America's Future. (1996b). *No dream denied: A pledge to America's children*. Washington, DC: Author.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. New York, NY: McGraw-Hill.

Pascal, P. (2009). Assessing organizational citizenship behavior in the French context: Evidence for the four-dimensional model. *Journal of Psychology, 143,* 133-146.

Putnam, R. T., & Borko, H. (1997). Teacher learning: Implications of new views of cognition. In B. J. Biddle, T. L. Good, & I. F. Goodson (Eds.), *International handbook of teachers and teaching: Part Two* (pp. 1223-1296). Boston, MA: Kluwer.

Renyi, J. (1996). *Teachers take charge of their learning: Transforming professional development for student success*. Washington, DC: The National Foundation for the Improvement of Education.

Sage Jacqueline, A-M., Shapiro, C., Kessler, I., & Purcell, J. (2004). Exploring Organizationally Directed Citizenship Behavior: Reciprocity or 'It's my job? *Journal of Management Studies, 41,* 1.

Sirotnik, K. A. (1989). The school as the center of change. In T. J. Sergiovanni & J. H. Moore (Eds.), *Schooling for Tomorrow: Directing reforms to issues that count* (pp. 89-113). Boston, MA: Allyn & Bacon.

Sullivan, J. L. (2010). *The influence of school culture, school goals, and teacher collaboration on teachers' attitudes toward their professional development plans*. Unpublished doctoral dissertation, George Mason University.

Sykes, G. (1999a). Introduction: Teaching as the learning profession. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. xv-xxiii). San Francisco, CA: Jossey-Bass.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Sydney, Australia: Allyn & Bacon.

Teaching and Learning International Survey. (2009). *Creating Effective Teaching & Learning Environment*. Retrieved from http://www.oecd.org/ff/?404;http://www.oecd.org:80/edu/talis

The Staff Development and Performance Evaluation Processes. (2008). Retrieved from http://www.sagepub.com/upm-data/21423_Chapter_7.pdf

UNESCO Institute for Statistics, Data Centre. (2008). Retrieved from http://stats.uis.unesco.org/unesco/ReportFolders/ReportFolders.aspx

Wise, A. E. (1996). Foreword. In J. Renyi (Ed.), *Teachers take charge of their learning: Transforming professional development for student success* (pp. xi-xii). Washington, DC: The National Foundation for the Improvement of Education.

Wood, F., Thompson, S., & Russell, F. (1981). Designing effective staff development programs. In B. Dillon-Peterson (Ed.), Staff development/organization development (pp. 59-91). Alexandria, VA: Association for Supervision and Curriculum Development.