

# Analysis of Primary School Teachers' Pedagogical Competencies through Talent Search Matrix

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## ABSTRACT

One of the essential competent instructive strategies mandatory for teachers to master is the pedagogical element. This strategy adopted by teachers shapes the spirituality of the teaching profession, helps them in understanding the basic potential and learning performance of individual students, and becomes a fundamental aspect in their competency profile. Therefore, this study aims to analyze the characteristics of primary school teacher pedagogical competencies through talent search matrix in public and private primary school. This is a quantitative research with a descriptive approach. Data were collected from 264 teachers of state and private elementary schools in the Municipality of West Jakarta in DKI Jakarta Province, through a web-based application using the talent search matrix (TSM). The data obtained were further analyzed using the quantitative descriptive method. The result showed that the spirituality of the teaching profession, basic potential and learning performance of the teacher competency profile in both public and private primary school is low and needs to be improved. Therefore, teachers need to develop these fundamental aspects as the key to successful learning.

**Keywords** Initial Characteristics, Spirituality of the teacher's profession, Basic Potential, Learning Performance, Talent Search Matrix

*Article Received: 18 October 2020, Revised: 3 November 2020, Accepted: 24 December 2020*

## Introduction

The educational challenges facing the Indonesian education system is rooted in teachers pedagogical competence (Brown, Friesen, Beck, & Roberts, 2020; Kusumaningtyas, D. A., Jumadi, Istiyono, E., & Sulisworo, 2020). According to the Cultural Education Human Resources Development Agency, teachers' pedagogical competence in DKI Jakarta is low at 51% with 29.5% certification and high cases of violence in schools. It is necessary to develop pedagogical competencies in educational institutions due to the present level of teachers' unpreparedness to educate students (Berchini, 2017; Yakymenko, S. I., Bilyavska, T. M., & Tymchenko, 2020). Furthermore, with the inception of the Covid 19 pandemic, teachers need to remain competent with the ability to utilize Content Knowledge and Technological Pedagogical (TPACK) to facilitate the creative, innovative and superior value of elementary school students (Boiarska-Khomenko, Liudmyla, Valeriia, Olena, & Oleksii, 2020; Susanto, Rachmadtullah, & Rachbini, 2020). Teachers also need to continuously develop and assess their

leadership, methodical didactic and potential social capacity (Kusumaningtyas, D. A., Jumadi, Istiyono, E., & Sulisworo, 2020). Empirical data shows that the influence associated with the contribution of pedagogical competencies as performance to the graduate profile with elementary school teacher performance is at 46.7% (Berchini, 2017; Suarmika, 2018; Susanto & Rachmadtullah, 2019; Wijaya, 2020).

Teacher pedagogical competence is also influenced by race, which is the background for teachers to have experience based on their race (Milton-Williams & Bryan, 2016). The study of teacher pedagogical abilities really needs to be developed towards digital pedagogy, especially in elementary schools (Dey & Dey, 2021). We must develop education in elementary schools that use chalk and talk (Dey & Dey, 2021) in this century using digital through e-learning. Educators' competence can be realized from their ability to convey cognitive, affective, and psychomotor abilities to students (Kuivila et al., 2020). A teacher can embrace Generation X, Y, and Z by implementing the following three domains: "the

competence-centered teacher”, “the empathetic teacher” and “the innovative teacher” (Reyes et al., 2020).

Furthermore, teachers need to identify the individual characteristics of each student by themselves (Epitropaki & Martin, 2005; Lavrijsen & Verschueren, 2020; Sharma, 2020). The initial characteristics of pedagogical competence include professional spirituality, basic potential, learning performance and self-map in the Talent Search Matrix (TSM) (Korthagen, Loughran, & Russell, 2006). Teacher professionalism is perceived as a profound meaning and value for their profession (Darrell & Rich, 2017; Hodge & Derezotes, 2008; Susanto, Ratnawati; Asmi Rozali, 2020). This is also associated with the strategies used by teachers to identify the basic characteristics of each student, besides teaching them how to read, write and count. Presently, the new strategies used in forming pedagogical competencies comprises of 74% change effect (Hodge & Derezotes, 2008; Wild & Heuling, 2020) and also describes the spirituality of the profession into a culture necessary in shaping pedagogical competence (Darling-Hammond, 2000; Korthagen et al., 2006). Based on the explanation that has been presented and the results of previous research, this study was conducted to analyze the early characteristics of the primary school teachers' pedagogical competencies through the talent search matrix of Public and Private Primary Schools in West Jakarta, DKI Jakarta Province.

## Literature Review

### Teacher's Pedagogical Competencies

The basic potential is the desire and willingness of learning to grow and develop, and this is measured by the frequency of self-development activities (Pashko & Pinchuk, 2020; Spörer, Henke, & Bosse, n.d.). Dirk Schneckenberg stated that basic potential is a learning design with significant implications, which focuses on developing competencies (Fuentes-Moreno, Sabariego-Puig, & Ambros-Pallarés, 2020; Schneckenberg, Ehlers, & Adelsberger, 2011).

According to Guarino, it is a reliable measure of learning performance in classroom action (Schneckenberg et al., 2011). In addition, T. Dee defined it as the totality of a performance, namely the ability of teachers to manage behavior change (Dee & Wyckoff, 2015). Subsequently, Elliot reported that it is the development through teacher performance and the key to changing learning behavior (Elliott, 2015). Support for teacher growth is essential due to its significant importance in facilitating learning, growth and development in both individuals and organizations (Lamberg, Gillette-Koyen, & Moss, 2020; Shulman & Sherin, 2004).

### Talent Search Matrix (TSM)

The initial characteristics that cover potential and performance are mapped with Talent search matrix (TSM), which is a matrix that maps the position of the meeting of basic potential (X) and learning performance (Y) in 9 quadrants. Teachers as HR are classified as high performance when they are at a meeting, namely (1) high basic potential and performance (3,3, quadrant 9, blue symbol), (2) high basic potential and sufficient performance (3,2, quadrant 4, green color), (3) sufficient basic potential and high performance (2,3, quadrant 8, green color). The self-group map is sufficient when it has (1) high basic potential and low performance (3,1, quadrant 3, yellow), (2) sufficient basic potential and performance (2,2, quadrant 5, yellow), and (3) low basic and high-performance potential (1,3, quadrant 7, yellow). Furthermore, it has low self-map when it has: (1) low basic potential and performance (1,1, quadrant 1, red), (2) sufficient basic potential and low performance (2, 1, quadrant 2, orange color), and (3) low basic potential and sufficient performance (1,2, quadrant 6, orange).

Furthermore, each quadrant is visualized in their respective colors that reflect the quality of potential and performance. Therefore, from the application of this TSM, the following are achieved: (1) members are assessed based on the level of ability needed by the organization, (2) each individual knows their abilities, (3)

teachers are introduced to the right strategies required to improve their potential and performance. The use of TSM is an approach that represents a learning model to improve self-competence (Darrell & Rich, 2017; Hodge & Derezotes, 2008; Jorgensen, 2020; Ramanath et al., 2018).

## Methods

This is a quantitative research with a descriptive approach used to analyze the Early Characteristics of Primary School Teacher Pedagogical Competencies through the Talent Search Matrix. Data were collected from 264 teachers of state and private elementary schools in the Municipality of West Jakarta in DKI Jakarta Province, through a web-based application using the talent search matrix (TSM). This matrix is used to map the human resources of an organization, and it was modified by Ratnawati Susanto. The instrument used in measuring teacher potential and performance is grouped into nine quadrants for the development of pedagogical competency profiles and models. The research data were analyzed using quantitative descriptive techniques.

## Results and Discussion

The results of this study are used to describe the characteristics and spirituality of the teaching profession, as well as the potential and performance of teachers of Public and Private Primary Schools in the West Jakarta Municipality, DKI Jakarta Province.

### 3.1. Characteristics and Meaning of Professional Spiritual to Teachers

The spirituality of the teaching profession is assessed by exploring the meaning/value of the teacher's work by writing a self-description essay containing a maximum of 200 words using a web-based assessment application.

**Table 1.** Meaning of Primary School Teacher Professional Spirituality

No	School Status	Meaning/Spirituality Value of Teacher School Professionals			
		Uvaa I/LV	UV aMFOt S	NAaD	T
1	PES	85	40	7	132
2	PrES	60	50	22	132
T/A		145	90	29	264
		264			

No	School Status	Meaning/Spirituality Value of Teacher School Professionals		
		PoUVAaI/LV	PoUVAMFOtS	PoNaad
1	PES	65%	30%	5%
2	PrES	45%	38%	17%
T/A		55%	34%	11%
		100%		

Information:

- PES : Public Elementary School  
 PrES : Private Elementary School  
 T : Total  
 A : Average  
 UvaaI : Understanding Value as a Ideal  
 LV : Live Vocation  
 UvaMFOtS : Understanding Value As Motivation From Outside the Self  
 NAaD : Not As A Dream  
 PoUVAaI : Percentage of Understanding Value As a Ideal  
 PoUVAMFOtS : Percentage of Understanding Value As Motivation From Outside the Self  
 PoNaad : Percentage of Not as a Dream

From the table it can be concluded that: (1) only 65% of teachers interpret the profession as a vocation, while the remaining 35% are in other categories, (2) 45% of private elementary school teachers interpret it as a calling, while the remaining 55% are in different groups, (3) On the average the vocation of life as a teacher in SDN and SDS in West Jakarta Municipality, DKI

Jakarta Province is at a level of 55%. These findings show that the teaching profession is not the primary choice of people when choosing a career path. The low spirituality associated with the teaching profession is a predictor and explanation of the phenomenon related to the problem of low pedagogical competence (Berchini, 2017; Klaassen, 2002; Madhavaram & Laverie, 2010; Ramdani, Fawaid, Abizar, & Fatkhurokhman, 2020).

### 3.2. Characteristics of Potential Desires and Willingness of Teachers to Learn to Grow and Development Effort

The explorations of basic potential classified as the frequency of learning to grow and develop through self-developmental activities are classified as follows:

**Table 2.** Basic Potential Actions to Grow and Develop through Primary School Teacher Self Development Efforts

No.	School Status	Basic Potential of Growing and Developing Actions Through Self Development Efforts			
		$\geq 7$	4-6	$\leq 3$	T
1	PES	27	61	44	132
2	PrES	37	39	56	132
	T/V	64	100	100	264
		264			

No.	School Status	Basic Potential of Growing and Developing Actions Through Self Development Efforts		
		$\% \geq 7$	$\% 4-6$	$\% \leq 3$
1	PES	20.5%	46.2%	46%
2	PrES	28%	29.5%	42.4%
		24.2%	37.9%	42.4%
		100%		

Information:

PES : Public Elementary School

PrES : Private Elementary School

$\geq 7$  : Following  $\geq 7$  times/ year of learning to grow and develop in self development activities

4-6 : Following 4-6 times/ year learning actions grow and develop in self development activities

$\leq 3$  : Participate in  $\leq 3$  times/ year of learning to grow and develop in self development activities

T : Total

From the table, it can be concluded that the tendency of teachers in state schools to take actions to grow and develop is much smaller (20.5%) compared to private school teachers (28%) with a frequency of  $\geq 7$  times/year. In addition, the average number of teachers in West Jakarta is 24, with 2% having the potential to participate in growth and development. This, therefore, implies the need to develop a pedagogical competency model using Dirk Schneckenberg's research on improving teachers' basic potential (Fuentes-Moreno et al., 2020; Schneckenberg et al., 2011). Analysis of this research has provided an empirical data that the low pedagogical competence is also caused by the reduced rate of teachers' basic potential to take self-development actions to learn and grow in the Municipality of West Jakarta, DKI Jakarta Province.

### 3.3. Learning Performance that Shows The Ability of Teachers to Manage Changes in Student Learning Behavior

Guarino research proved that a reliable measure of observing the action on learning performance is obtained in the classroom (Guarino, Brown, & Wyse, 2011; Santagata & Guarino, 2011). Furthermore, research on the impact of teacher performance in learning carried out by T. Dee stated that the totality of performance is attributed to the impact associated with the ability of teachers to manage changes in student behavior (Aronson, 2020; Dee & Wyckoff, 2015). K. Elliot reported that competency development through

teacher performance is a key to optimizing student learning behavior (Elliott, 2015; He & Cooper, 2009; Rahminawati, Hakim, Sobarna, & Masnipal, 2020). Table 3 shows the result of the learning performance as a teacher's ability to manage changes in student learning behavior.

**Table 3.** Elementary School Teacher Learning Performance

No.	School Status	Basic Potential of Growing and Developing Actions Through Self Development Efforts			
		≤ 10%	11-30%	≥30%	T
1	PES	37	47	48	132
2	PrES	24	55	53	132
	T/V	61	102	101	264
		264			

No.	School Status	Basic Potential of Growing and Developing Actions Through Self Development Efforts		
		≤ 10%	11-30%	≥30%
1	PES	28%	35.6%	36.4%
2	PrES	18.2%	41.7%	40.2%
		23.1%	38.6%	38.3%
		100%		

Information:

PES : Public Elementary School

PrES : Private Elementary School

The table showed that 28% of elementary school teachers experience challenges in handling less than 10% of students with learning behavior problems. This is a greater level, compared to the private elementary school teachers at a magnitude of 18.2%, thereby providing a framework for that links the low spirituality of the teaching profession and the basic potential for handling student learning behavior. Several studies have shown that learning performance measures has become part of the initial characteristics of the

spirituality of the teaching profession and basic potential (Dee & Wyckoff, 2015; Elliott, 2015; Guarino et al., 2011; Reisoğlu & Çebi, 2020). Therefore, the learning performance is key to changing students' learning behavior (Black & Deci, 2000; Burman, Som, & Hossain, 2020).

### 3.4. Self Map, As a Meeting of The Basic Potential and Learning Performance

The mapping of basic potential meeting positions and learning performance is carried out using the 9 quadrant Talent search matrix (TSM). This approach is used to represent competency profiles in order to improve individual and organizational self-competence. The self-map of public and private elementary school teachers in the West Jakarta Municipality, DKI Jakarta Province is shown in table 4.

**Table 4.** Primary School Teacher's Self-Map

No.	School Status	Self Map			
		High			
		K 9 (3.3)	K 4 (3.2)	K 8 (2.3)	T
1	PES	11	8	21	40
2	PrES	10	8	20	38
	TSM Organization	21	16	41	78
No.	School Status	Self Map			
		Moderate			
		K 3 (3.1)	K 5 (2.2)	K 7 (1.3)	T
1	PES	8	20	5	33
2	PrES	6	15	7	28
	TSM Organization	14	35	12	61

No .	School Status	Self Map				T
		Low				
		K 1 (1.1)	K 2 (2.1)	K 6 (1.2)	T	
1	PES	20	20	19	59	132



2	PrES	30	20	16	66	13 2
	TSM Organiza tion	50	40	35	12 5	26 4

No.	School Status	Self Map			
		Percentage of High			
		K 9 (3.3)	K 4 (3.2)	K 8 (2.3)	T
1	PES	8%	6%	16%	30%
2	PrES	8%	6%	15%	29%
	TSM Organization	8%	6%	16%	30%
No.	School Status	Self Map			
		Percentage of Moderate			
		K 3 (3.1)	K 5 (2.2)	K 7 (1.3)	T
1	PES	6%	15%	4%	25%
2	PrES	5%	11%	5%	21%
	TSM Organization	3%	7%	5%	23%

No .	School Status	Self Map				T
		Percentage of Low				
		K 1 (1.1 )	K 2 (2.1 )	K 6 (1.2 )	T	
1	PES	15 %	15 %	14 %	45 %	100 %
2	PrES	23 %	15 %	12 %	50 %	100 %
	TSM Organiza tion	19 %	15 %	13 %	47 %	100 %

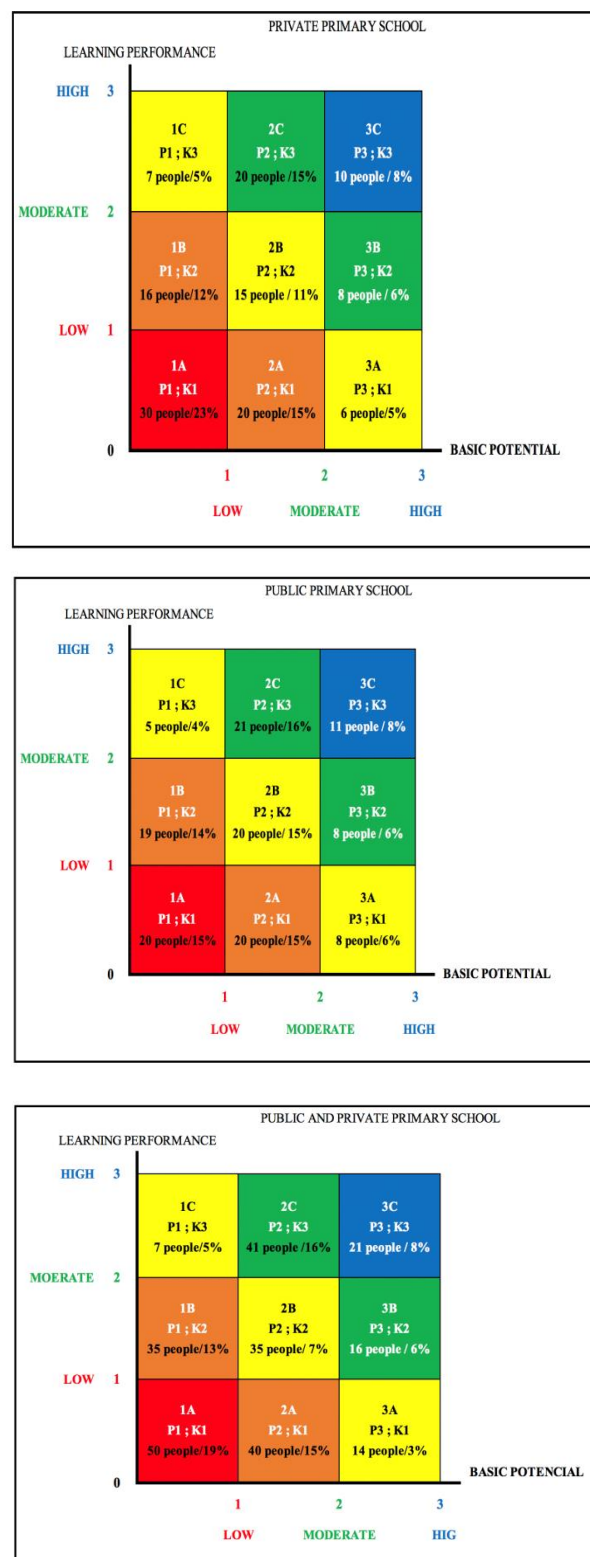
Information:

PES : Public Elementary School

PrES : Private Elementary School

The table shows that public and private primary school teachers have high and sufficient quality self-assessment, of 55% and 50%, respectively. This means that there is still a large record of

improving the self-map of public or private primary school teachers by 47%. Furthermore, by using TSM (Talent Search Matrix), the elementary school teacher's self-map in DKI Jakarta Province can be described as follows:



**Figure I.** Contribution of Magnitude of Primary School Teacher's Map with Talent Search Matrix

This TSM (Talent Search Matrix) in Figure 1 describes the basic potential data and the performance of Public and Private Primary School teachers as follows: (1) state Elementary School teachers with high-performance potential are in quadrants 9, 8 and 6 with 31% and 29% in Private and Public Primary Schools, as well as an average of 30%; (2) state Elementary School teachers with sufficient performance potential are in quadrants 3, 5, 7 with 25% and 21% in Private and Public Primary Schools, as well as an average of 23%; (3) state Elementary School teachers with low-performance potential are at quadrants 1, 2 and 6 with 44% and 50% in Private and Public Primary Schools, as well as an average of 47%. This fact becomes a fundamental data need to focus on developing the pedagogical competency model.

The teacher's understanding of the map needs to be carried out consistently and periodically by the organization by assessing the initial characteristics in order to improve their ability to: (1) assess the level of ability needed by an organization, (2) assess each other's abilities, (3) provide knowledge and skills to conduct an assessment of self-maps including basic potential and learning performance. Furthermore, through TSM mapping, teachers and schools have an approach that can present learning models to improve pedagogical competencies starting from initial characteristics fundamentally.

## Conclusion

Identification of Preliminary Characteristics of Primary and Private Primary School Teachers in the Municipality of West Jakarta, DKI Jakarta Province is in a low condition both in aspects of Teacher Professional Spirituality, Basic Potential and Learning Performance. Through the use of Talent Search Matrices (TSM) as a tool and approach to mapping basic potentials and Learning Performance proves that the low spirituality of the teaching profession, basic potential and learning performance becomes a fundamental aspect in the teacher competency profile. Spiritual aspects of the teaching

profession, basic potential, learning performance and self-maps become a measure in the initial characteristics of teachers that need to be carried out consistently and continuously at the individual teacher level and organization in order to increase the capacity and capability of educational organizations and overcome the problems of low teacher pedagogical competence.

## Acknowledgement

Thank you to the Ministry of Research and Technology of the Directorate of Higher Education for funding this research through the Higher Education Applied Research Scheme (PTUPT) in the 2020 Budget Year. Next, thank you to the Chancellor, Vice Chancellors and Research and Community Service Institution (LPPM) Esa Unggul University, Jakarta, Indonesia.

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