



**PEDAGOGICAL SKILL, PROFESSIONAL COMPETENCE  
AND WORK MOTIVATION: ITS IMPACTS ON NATURAL SCIENCE  
TEACHERS' PERFORMANCE IN ALL JUNIOR HIGH SCHOOLS  
IN BONE BOLANGO REGENCY, INDONESIA**

**Kudus<sup>i</sup>,  
Yoseph Paramata,  
Evi Hulukati,  
Novri Y. Kandowangko**  
Universitas Negeri Gorontalo,  
Indonesia

**Abstract:**

The objective of this research is to identify the influence of pedagogical skill, professional competence and work motivation on teachers' performance. This research employed a survey method where the data were generated from a questionnaire and observation. The data were further analyzed by using descriptive and inferential analysis with *path analysis* approach. As many as 62 natural science teachers based in all public junior high schools Bone Bolango were the research population; 57 among them were selected as the sample. The result reveals that teachers' performance is significantly influenced by pedagogical skills, professional competence, and work motivation. In addition, the teacher's motivation is determined by pedagogical skills and professional competence. The variable of pedagogical skill also contributes to the professional competence. On the other hand, some variables, such as pedagogical competence and professional competence (through the variable of work motivation) indirectly affect each other.

**Keywords:** pedagogical skill, professional competence, work motivation, natural science teachers' performance

**1. Introduction**

Indonesia, according to the information by the Ministry of Education and Culture on June 15, 2017 (Gorontalo Post, 16 June 2017), is yet to provide quality education. This is signified by a decline in the results of the students' national examination in junior high level. The average score of the students' exam drops from 58.61 (2016) to 54.28 (2017).

---

<sup>i</sup> Correspondence e-mail: [transbahasa.ilmiah@gmail.com](mailto:transbahasa.ilmiah@gmail.com)

Immediate response by the schools is essential to address such an issue. This notion is also in line with the argument by the head of the Center for Educational Assessment, Ministry of Education and Culture.

Teacher's position as an educator is crucial in learning as the teacher is in contact directly with the students as a subject and object of learning. Promoting effective learning atmosphere demands systematic components, e.g. student, teacher, learning objective, instructional media, learning model, methods and media, as well as the condition of the classroom.

So important is the role of a teacher that it requires a comprehensive understanding regarding the contribution of teaching in learning by the teacher. In addition, the importance of teacher's role is driven by the expectation that the student should gain knowledge from the learning. Uzer Usman (2011: 4) defines learning as *"a process comprising of the reciprocal relationship of teacher and student in an educational atmosphere to attain a particular goal. This interaction is crucial to the teaching and learning process."*

Teaching and learning are considered effective if it successfully establishes a conducive environment and consequently boots the student's motivation to learn. A teacher is obliged to design the learning activities in a systematical order prior to starting the class. This is to enhance the competence of the teacher in teaching. It is crucial for a teacher to seek for various attempts in increasing the student's interest since the teacher is obliged to master pedagogical competence (Yunia, 2015).

Despite the fact that the teachers in Bone Bolango regency have earned bachelor, even master degree qualification and other teacher training and workshops, the result of student's national examination in the area is considered poor. This signifies that the teachers' performance is unable to yield a positive result, especially in terms of achieving a minimum score in the national examination.

Although the aforementioned problem is nation-wide, the researcher focuses on exploring Bone Bolango regency due to the fact that the Regional Coordinator, the Education Control Committee, school principals, teachers, and the Office of Education and Cultural Affairs of Bone Bolango regency has committed to success the national examination. Furthermore, Office of Education and Cultural Affairs of Bone Bolango regency has instructed all principals and supervisors to improve their performance in dealing with national examination problems.

Other efforts to success the examination are 1) having additional class sessions for the grade IX students; 2) conducting paper-based national examination tryout and informing the students their tryout result; 3) conducting computer-based national examination simulation and informing as well as ranking the student's result-the information regarding this is informed during monthly meeting or other seminars; 4) promoting group learning to get the students prepared for the examination, and; 5) providing the students with facilities and support, such as computer and server, and funding through programs, e.g. BOS, APBD, and APBN.

The data of the result of national examination of Gorontalo Province reports that Bone Bolango regency is placed at the fourth rank in 2015/2016. Among the six regencies in the province, Bone Bolango regency further ranks in the second and first place in 2016/2017 and 2017/2018 academic year.

The above discussion serves as the grounding to carry out this present study entitled "Pedagogical Skill, Professional Competence and Work Motivation: Its Impacts on Natural Science Teachers' Performance in All Junior High Schools in Bone Bolango Regency."

## 2. Literature Review

### 2.1 Defining Teacher's Performance

The term "performance" is defined as the level of a person's achievement in carrying out his or her duty in a particular period. The extent of the success is compared with several aspects, e.g. work output standard and common goals that have been established (Ilyas Ismail, 2010: 45).

Teacher's performance refers to the manifestation of teacher's duties and responsibilities by referring to a particular standard and criteria (Trianda, 2014). It also refers to the outcome of the quality and number of the work, including the responsibility to design the learning and lesson plan as well as to evaluate and assess the evaluation (Wahyudi, 2012) (Tiffany Alessandra, Samsi, 2013).

Hafid (2017: 309) further adds that teacher's performance is the way the teacher manages the class and learning effectively to attain the objective of learning.

From the above definitions, it can be concluded that the term performance is the level of achievement of an individual within a certain period. Teacher's performance is regarded as the way the teacher successfully fulfill his or her responsibilities, involving designing learning activities, lesson plan, and assessment.

### 2.2 Pedagogical Skills

Teaching skill refers to teacher's pedagogical competences (Mulyasa, 2009). Pedagogical competences aim at facilitating the learning indirectly or directly to meet the target of the lesson (Samson & Wijyanthi, 2013).

Udin Syaefudin Saud (2010) points out that "*pedagogical skill is a set of teacher's activities in learning to establish a supportive learning atmosphere and to draw the students' attention to the lesson.*"

Basic pedagogical skill represents the attitude that the teacher requires as the grounding to carry out the teaching accordingly and to reflect his or her professionalism (Sumiah, 2013).

Similarly, Rusman (2011: 80) argues that basic teaching skill is a "*common trait of an individual that relates to the knowledge and competence manifested in his or her action.*" Uzer (Usman, 2011:74) poses eight (8) teaching skills, such as (1) asking questions, (2) reinforcement, (3) implementing variation, (4) explaining, (5) opening and closing a

lesson, (6) guiding small group discussion, (7) class management, and (8) teaching small group and individual.

All in all, pedagogical competence refers to a set of skills of a teacher in teaching; it is aimed at accomplishing the learning goal and help the student understand a lesson easily. The skill comprises eight points, i.e. (1) asking questions, (2) reinforcement, (3) implementing variation, (4) explaining, (5) opening and closing a lesson, (6) guiding small group discussion, (7) class management, and (8) teaching small group and individual.

### 2.3 Professional Competence

Act No. 14 of 2005 Considering Teacher and Lecturer, Article 1 paragraph (10) states that *"competence is a set of knowledge, skills, and behaviors that must be possessed and mastered by the teacher and lecturer in carrying out professional duties."*

Competence is simply the ability, skill and knowledge of an individual in a particular discipline. This resonates to the definition by Ismail (2010) explaining that competence refers to the capability of carrying out certain tasks according to the established requirement.

Teacher's competence is defined as the insight, skill and attitude of a teacher represented in his or her behavior and responsibilities in the teaching profession (Novauli, M, 2015: 46).

Anggara and Chotimah further add that competence functions to maximize the teacher's performance, resulting in an appropriate learning outcome that meets the objective (Anggara and Chotimah, 2012: 189).

According to Spencer and Spencer (1993: 9), *"competency is underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation."* To put it simply, competence is a basic trait related to the effective performance in a certain circumstance of an individual.

Teacher's competence is an integration of abilities, e.g. personal skill, knowledge, technology, social skill and spirituality that shapes the standard competence of a teacher. Mulyasa (2007) poses that spirituality involves a set of aspects, such as mastery on the lesson, understanding students' character, designing educated learning, as well as personal and professional development.

Professional competence is a term describing comprehensive mastery on a learning material that enables the teacher to guide the students according to the National Education Standard (Asmara, 2015: 24).

Teacher's professional competence refers to a set of abilities of a teacher to successfully carrying out his or her duties (Fatmasari, 2014: 2).

Teacher's competence is defined as the insight, skill and attitude of a teacher represented in his or her behavior and responsibilities in the teaching profession as stated in the Regulation of the Government of the Republic of Indonesia No. 19 of 2005 Article 28 Paragraph (3).

*“Professional competence is described as an in-depth mastery on learning that encompasses the curriculum of a subject, its substantial knowledge, as well as the mastery on the structure and methodology of the subject.” (Kunandar, 2009: 77)*

Soetjipto et al. (1999) propose five professional competences of a teacher, such as 1) ability to deliver a lesson, 2) intellectual thinking, 3) developing and maintaining interpersonal relationship, 4) developing professional networking, 5) personal development, and 6) discipline (Asmara, 2015: 25).

To sum up, competence is the knowledge and skill that the teacher must possess to carry out his or her work professionally. Professional competence refers to the ability to master the knowledge comprehensively. This is constituted in the National Education Standard with the indicators, i.e. (1) mastery on material, structure, concept, and perspective of discipline or subject of the teacher, (2) mastering standard and basic competence of taught subject, (3) creatively developing the subject taught, (4) sustaining professional development for reflection, (5) utilizing information and technology to communicate and to enhance self-development program.

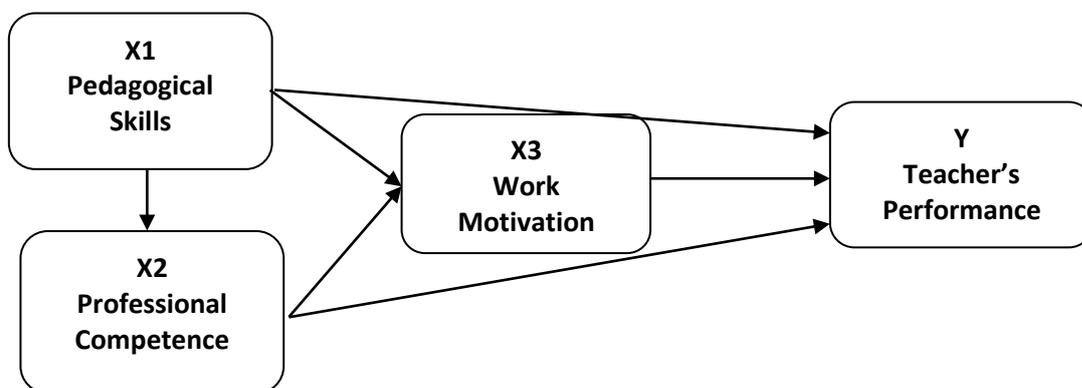
### 3. Research Methodology.

#### 3.1 Site and Time of Research

This research took place in all junior high schools within Bone Bolango regency starting from September 2017. The sample was selected by probability sampling or simple random sampling method. It was done randomly without considering the characteristics of the sample to achieve homogeneity.

#### 3.2 Research Design

This quantitative study employed survey and path analysis method. Teacher's performance (Y) serves as the dependent variable while pedagogical skills (X1), professional competence (X2), and work motivation (X3) are the independent variable. The research design is depicted in the following figure.



**Figure 1:** Research Design

### 3.3 Population and Sample

The population involved all 62 natural science teachers in the research site. Since the population, i.e. the natural science teachers, is considered homogenous, simple random sampling was employed to determine the research sample (Sugiyono, 2014: 64). The sample consisted of 57 individuals.

### 3.4 Data Collection

Field observation on the research object was done to generate the data; the data collection procedures are as follows:

1. Distributing the questionnaire to the teachers. This is to gather information regarding their performance and work motivation.
2. The observation to identify teacher's pedagogical skills was done by a school supervisor and principal.
3. Documenting or taking note from the research participants to generate the data.

### 3.5 Data Analysis

The data were analyzed by using the descriptive and inferential method. The descriptive analysis aims at describing the raw data through a table of frequency of distribution of the group data. Aspects, such as the mean, median, modus, and standard deviation of the data were further calculated and visualized on a histogram.

Inferential analysis was done to test the research hypothesis. Path analysis was applied as the statistical test to examine the significant contribution and indirect influence of the exogenous variable on the endogen variable.

## 4. Results

### 4.1 Validity Test on Variable Y (Teacher's Performance)

The questionnaire containing 52 questions was designed according to the indicator of teacher's performance. Following this step was a validation by the expert and a trial involving 10 respondents. The result of the trial was validated by using product moment correlation formula; it is revealed that 40 questions are valid while the remaining 12 questions are invalid. The detail is provided on the following Table 1.

**Table 1:** Coefficient Validation and Status Validation of Teachers' Performance

No. Question Number	r <sub>count</sub>	r <sub>table</sub>	Description
1	-0.046		Invalid
2	0.653		Valid
3	0.640		Valid
4	0.718		Valid
5	0.743		Valid
6	0.789		Valid
7	0.821		Valid

Kudus, Yoseph Paramata, Evi Hulukati, Novri Y. Kandowanko  
 PEDAGOGICAL SKILL, PROFESSIONAL COMPETENCE AND WORK MOTIVATION:  
 ITS IMPACTS ON NATURAL SCIENCE TEACHERS' PERFORMANCE IN ALL JUNIOR HIGH SCHOOLS  
 IN BONE BOLANGO REGENCY, INDONESIA

8	0.483		Invalid
9	0.791		Valid
10	0.734		Valid
11	0.500	0.632	Invalid
12	0.751		Valid
13	0.716		Valid
14	0.668		Valid
15	0.834		Valid
16	0.773		Valid
17	0.362		Invalid
18	0.753		Valid
19	0.812		Valid
20	0.786		Valid
21	0.727		Valid
22	0.729		Valid
23	0.714		Valid
24	0.681		Valid
25	0.713		Valid
26	0.626		Invalid
27	0.642		Valid
28	0.724		Valid
29	0.640		Valid
30	0.805		Valid
31	0.778		Valid
32	0.759		Valid
33	0.475		Invalid
34	0.893		Valid
35	0.893		Valid
36	0.882		Valid
37	0.868		Valid
38	0.716		Valid
39	-0.649		Invalid
40	0.780		Valid
41	-0.194		Invalid
42	0.748		Valid
43	0.675		Valid
44	0.716		Valid
45	0.657		Valid
46	0.737		Valid
47	-0.086		Invalid
48	-0.711		Invalid
49	0.694		Valid
50	0.103		Invalid
51	0.678		Valid
52	0.384		Invalid

#### 4.2 Reliability Test of Variable Y (Teacher's Performance)

Numbers that have been confirmed valid were further examined by using an alpha formula to determine its reliability. Please refer to Appendices 2 for the detailed result of the calculation on page 146.

$$r_{11} = \frac{K}{(K-1)} \left( 1 - \frac{\sum \delta_b^2}{\sum \delta_i^2} \right) = \frac{41}{(41-1)} \left( 1 - \frac{48,433}{1041,822} \right) = 0,979$$

It is revealed that the reliability of variable Y is at 0.979.

The classification of the reliability correlation is as follows.

- 0.00 <math>\alpha \leq 0.20</math> : very low
- 0.20 <math>\alpha \leq 0.40</math> : low
- 0.40 <math>\alpha \leq 0.70</math> : adequate
- 0.70 <math>\alpha \leq 0.90</math> : high
- 0.90 <math>\alpha \leq 1.00</math> : very high**

#### 4.3 Validity Test of Variable X<sub>3</sub> (Work Motivation)

The questionnaire containing 51 questions was designed according to the indicator of the work variable. Following this step was a validation by the expert and a trial involving 10 respondents. The result of the trial was validated by using product moment correlation formula; it is revealed that 40 questions are valid while the remaining 11 questions are invalid. The detail is provided in Table 2 as follows.

**Table 2:** Coefficient Validation and Status Validation of Work Motivation

No. Question Number	r <sub>count</sub>	r <sub>table</sub>	Description
1	0.755		Valid
2	0.799		Valid
3	0.829		Valid
4	0.812		Valid
5	0.537		Invalid
6	0.973		Valid
7	0.619		Invalid
8	0.939		Valid
9	0.831		Valid
10	0.014		Invalid
11	0.787		Valid
12	0.993	0.632	Valid
13	0.974		Valid
14	0.343		Invalid
15	0.876		Valid
16	0.666		Valid
17	0.981		Valid
18	0.983		Valid

Kudus, Yoseph Paramata, Evi Hulukati, Novri Y. Kandowangko  
 PEDAGOGICAL SKILL, PROFESSIONAL COMPETENCE AND WORK MOTIVATION:  
 ITS IMPACTS ON NATURAL SCIENCE TEACHERS' PERFORMANCE IN ALL JUNIOR HIGH SCHOOLS  
 IN BONE BOLANGO REGENCY, INDONESIA

19	0.983	Valid
20	0.532	Invalid
21	0.865	Valid
22	0.953	Valid
23	0.685	Valid
24	0.970	Valid
25	-0.305	Invalid
26	0.965	Valid
27	0.973	Valid
28	0.974	Valid
29	0.885	Valid
30	0.945	Valid
31	0.539	Invalid
32	0.907	Valid
33	0.948	Valid
34	0.973	Valid
35	0.692	Valid
36	0.986	Valid
37	0.547	Invalid
38	0.969	Valid
39	0.686	Valid
40	0.926	Valid
41	0.647	Valid
42	0.986	Valid
43	-0.603	Invalid
44	0.925	Valid
45	0.734	Valid
46	0.973	Valid
47	0.986	Valid
48	-0.675	Invalid
49	0.973	Valid
50	-0.532	Invalid
51	0.692	Valid

#### 4.4 Reliability Test of Variable X<sub>3</sub> (Work Motivation)

$$r_{11} = \frac{K}{(K-1)} \left( 1 - \frac{\sum \delta_b^2}{\sum \delta_t^2} \right) = \frac{40}{(40-1)} \left( 1 - \frac{99,100}{3081,789} \right) = 0,993$$

The reliability of the instrument X<sub>3</sub> is valued at 0.993. Please refer to Appendices 4 for the detailed result of the calculation on page 162.

The classification of the reliability correlation is as follows.

- 0.00 < α ≤ 0.20 : very low
- 0.20 < α ≤ 0.40 : low
- 0.40 < α ≤ 0.70 : adequate
- 0.70 < α ≤ 0.90 : high

**0.90 <math>\alpha \leq 1.00</math> : very high**

## 5. Discussion

It is revealed that:

1. The research hypothesis, i.e. that pedagogical skills or variable  $X_1$  significantly contributes to teacher's performance, is accepted (4.87%). This suggests that the improving pedagogical skills can boost the teacher's performance. The correlation between the variable  $X_1$  and  $Y$  is significant as the value of  $F_{\text{count}} = 48.517 > F_{\text{table}} = 4.01$ , meaning that  $H_0$  is rejected and  $H_1$  is accepted. The correlation between the variable  $X_1$  and  $Y$  is linear as the value of  $F_{\text{count}} = 1.070 > F_{\text{table}} = 1.86$ , meaning that  $H_0$ , that referring to this finding, is accepted.
2. The research hypothesis, i.e. that professional competence or variable  $X_2$  significantly contributes to teacher's performance or variable  $Y$ , is accepted (6.90%). This suggests that the improving professional competence can boost the teacher's performance. The correlation between the variable  $X_2$  and  $Y$  is significant as the value of  $F_{\text{count}} = 49.463 > F_{\text{table}} = 4.01$ , meaning that  $H_0$  is rejected and  $H_1$  is accepted. The correlation between the variable  $X_2$  and  $Y$  is linear as the value of  $F_{\text{count}} = 1.214 > F_{\text{table}} = 1.94$ , meaning that  $H_0$ , that referring to this finding, is accepted.

## 6. Conclusion

1. Pedagogical skills ( $X_1$ ) contribute to the teacher's performance ( $Y$ ) with the value of 4.87%. The correlation between  $X_1$  and  $Y$  is significant and linear.
2. Professional competence ( $X_2$ ) contributes to the teacher's performance ( $Y$ ) with the value of 6.90%. The correlation between  $X_2$  and  $Y$  is significant and linear.
3. Work motivation ( $X_3$ ) contributes to the teacher's performance ( $Y$ ) with the value of 27.75%. The correlation between  $X_3$  and  $Y$  is significant and linear.

### 6.1 Recommendations

Every teacher is obliged to comprehend and possess pedagogical skills, professional competence, and work motivation as these components are vital to teaching. Inviting experts in Teacher Development Group Forum (or *Musyawarah Guru Mata Pelajaran*, henceforth called MGMP) is crucial in improving those three aspects. In addition, workshops, seminars, internship and tutorial are also necessary to sustain the development of teachers in terms of the three key components as mentioned previously.

## References

- Anggara, R., & Chotimah, U. (2012). *Penerapan Lesson Study Berbasis Musyawarah Guru Mata Pelajaran (MGMP) terhadap Peningkatan Kompetensi Profesional Guru PKN SMP Se-Kabupaten Ogan Ilir*. Jurnal Forum Sosial, Dosen FKIP Universitas Sriwijaya
- Anggareni, N. W., Ristiati, N. P., Widiyanti, N. L. P. M, (2013). *Implementasi Strategi Pembelajaran Inkuiri Terhadap Kemampuan Berpikir Kritis dan Pemahaman Konsep IPA Siswa SMP*.E-Journal Program Pascasarjana Universitas Pendidikan Ganesha Singaraja, Indonesia.
- Bittel, L., Newstrom, J. W., Newstrom, J., (1994). *What Every Supervisor Should Know: The Complete Guide to Supervisory Management*, New York: McGraw-Hill, Inc.
- Burhanudin. (1990). *Analisis Administrasi Manajemen dan Kepemimpinan Pendidikan*. Jakarta: PT. Bumi Aksara.
- D. Agustin, I W. SUBagia, I. N. S. (2013). *Pengaruh Model Pembelajaran Sains Teknologi Masyarakat (STM) Terhadap Penguasaan Materi dan Keterampilan Pemecahan Masalah Siswa Pada Mata Program Studi Pendidikan IPA*. Program Pascasarjana Universitas Pendidikan Ganesha Singaraja, Indonesia.
- Depdiknas, D. P. M. P. dan T. K. (2008). *Penilaian kinerja guru*.
- Eliyanto, U. B. W. (2013). *Pengaruh Jenjang Pendidikan, Pelatihan, dan Pengalaman Mengajar Terhadap Profesionalisme Guru SMA Muhammadiyah di Kabupaten Kebumen*. Jurnal Akuntabilitas Manajemen Pendidikan, Nomor 1, 34–47.
- Endo Wijaya Kartika, & Thomas S. Kaihatu. (2010). *Analisis Pengaruh Motivasi Kerja Terhadap Kepuasan Kerja*. Jurnal Manajemen dan Kewirausahaan, Universitas Kristen Petra.
- Faridah, Wibowo Mardi Nugroho, Hartati Sri, (2018). *Pengaruhsertifikasidan Komitmen Terhadap Kinerja Guru Melalui Motivasi Kerja Pada SDN Gugus I Balikpapan Selatan*. Jurnal Manajemen Administrasi Publik Universitas Wijaya Putra Surabaya.
- Gibson, James I, Donnelly H, Ivancebich, John M. (1996). *Organisasi (Perilaku Struktur, Proses)*. Jakarta: Binarupa Aksara.
- Griffin, Ricky. W. (2004). *Manajemen Jilid 2. Edisi ketujuh*. Jakarta: Erlangga.
- Guntur Aryo Tejo, M. (2015). *Budaya Organisasi Terhadap Motivasi Kerja Serta Dampaknya Terhadap Kinerja Personil Bidang Humas Polda Riau*. Jurnal Tepak Manajemen Bisnis, Dosen Pascasarjana Universitas Riau.
- Hafid, M. (2017). *Pengaruh Motivasi dan Kompetensi Guru Terhadap Kinerja Guru Sekolah dan Madrasah di Lingkungan Pondok Pesantren Salafiyah Syafi' Iyah Sukorejo*. JPII Volume 1, Nomor 2 Institut Agama Islam Ibrahimy Situbondo.
- Helen Timperley, (2008). *Teacher Professional Learning AndDevelopment*. International Academy Of Education.Educational Practices Series – 18.
- Ilyas Ismail, M. (2010). *Kinerja dan Kompetensi Guru dalam Pembelajaran*. Jurnal Lentera Pendidikan. Kandidat Doktor Prodi PEP PPs Universitas Negeri Jakarta.

- Julia, D. S. (n.d.). *Identifikasi Kompetensi Guru Sebagai Cerminan Profesionalisme Tenaga Pendidik di Kabupaten Sumedang (Kajian Pada Kompetensi Pedagogik)*. Litbang Bappeda Kabupaten Sumedang.
- Keke T. Aritonang, Hasil, M., & Siswa, B. (2008). *Minat dan Motivasi dalam Meningkatkan Hasil Belajar Siswa*. Jurnal Pendidikan Penabur Nomor 10 Juni 2008.
- Kunandar. (2009). *Guru Profesional, Implementasi Kurikulum Tingkat Satuan Pendidikan (KTSP) dan Sukses Dalam Sertifikasi Guru*, Jakarta: Raja Grafindo Persada.
- Kusnadi. (2008). *Strategi Pembelajaran Ilmu Pengetahuan*. Pekanbaru: Yayasan.
- Kyriacou, C. (2007). *Essential Teaching Skills*. Incorporates The New QTS Standards For 2007, Third Edition.
- M. Novauli Feralys, (2015). *Kompetensi Guru Dalam Peningkatan Prestasi Belajar Pada SMP Negeri Dalam Kota Banda Aceh*. Jurnal Administrasi Pendidikan, Universitas Syiah Kuala.
- Mahsum, Muhammad. (2006). *Pengukuran Kinerja Sektor Publik*. Yogyakarta: BPFE UGM.
- Mangkunegara, Prabu, Anwar. (2010). *Evaluasi Kinerja Sumber Daya Manusia*.
- Mulyasa, E. (2007). *Standar Kompetensi dan Sertifikasi Guru*. Bandung: PT Remaja Rosdakary.
- Pertiwi, S. D. (2013). *Pengaruh Motivasi Kerja, Kepuasan kerja, Kepemimpinan kepala Sekolah Menurut Persepsi Guru, dan Iklim Sekolah Terhadap Kinerja Guru Ekonomi SMP Negeri di Kabupaten Wonogiri*. Jurnal Pendidikan Insan Mandiri Volume 1 Nomor 1 Tahun 2013, Universitas Sebelas Maret Surakarta
- Pramudyo, A. (2016). *Analisi Faktor-Faktor Yang Mempengaruhi Kinerja Dosen Negeri Pada Kopertis Wilayah V Yogyakarta*. JBTI Universitas Muhammadiyah Yogyakarta.
- Rahmatullah, M. (2016). *Kemampuan Mengajar Guru Dalam Meningkatkan*. Jurnal Penelitian Manajemen Pendidikan Volume 1 Nomor 2 Tahun 2016.
- Robbins, Stephen P., (2001), *Organizational Behavior*, New Jersey: Pearson Education International
- Rusman. (2011). *Model-Model Pembelajaran*. Jakarta. PT Raja Grafindo Persada.
- Sadilin, Samsudin (2005). *Manajemen Sumber Daya Manusia*. Bandung Pustaka Setia.
- Safitri, E., & Sontani, U. T. (2016). *Keterampilan Mengajar Guru dan Motivasi Belajar Teachers Teaching Skills and Student Learning Motivation*. Jurnal Pendidikan Manajemen Perkantoran Volume 1 Nomor 1 Agustus 2016.
- Samson, V. R., & Vyjayantthi, S. (2013). *Pre-University Teachers Teaching Skills*. Journal of Education and Practice, 5, 90-96.
- Sanjaya, Wina. (2008). *Pembelajaran Dalam Implementasi Kurikulum Berbasis Kompetensi*. Jakarta: Kencana Prenada Media Group.
- Saragih, A. H. (2008). *Kompetensi Minimal Seorang Guru Dalam Mengajar*. Jurnal Tabularasa Program Pascasarjana Universitas Medan Volume 5 Nomor 1.
- Sihabudin. (2016). *Pengaruh Kompetensi dan Kompensasi Terhadap Motivasi kerja di PT. Hamatetsu Indonesia*. Jurnal Manajemendan Bisnis, Universitas Buana Perjuangan Kerawang.

- Sobandi, A. (2010). *Pengaruh Kompetensi Guru Terhadap Kinerja Mengajar Guru SMKN Bidang Keahlian Bisnis dan Manajemen di Kota Bandung*. Jurnal Manajerial FPEP Universitas Pendidikan Bandung.
- Spencer, Lyle M., Jr. & Signe M., Spencer. (1993). *Competence at Work: Models for Superior Performance*. John Wiley & Sons. Inc.
- Uno Hamzah. (2016). *Teori Motivasi dan Pengukurannya. Analisa Dibiidang Pendidikan*. PT Bumi Aksara, Bandung.
- Usman Moh. Uzer. (2011). *Menjadi Guru Profesional*. Bandung: PT Remaja Rodaskarya.
- Villegas-Reimers, E. (2003). *Teacher Professional Development : an international review of the literature*. UNESCO International Institute for Education Planning.
- Wijaya dan Rusyan. (1994). *Kemampuan Dasar Guru Dalam Proses Belajar Mengajar*. Bandung : PT Remaja Rosdakary.
- Yuliana, (2013). *Pengaruh Keterampilan Mengajar Guru Terhadap Motivasi Belajar Siswa Kelas XI IPS SMA Katolik Talino*. Artikel Penelitian FKIP Universitas Tanjungpura Pontianak.
- YulianiTaufik, (2015). *Faktot-Faktor Yang Mempengaruhi Kinerja Guru SMA Negeri di Balikpapan*. Prosiding Seminar Nasional Pendidikan Akuntansidan Keuangan, Pendidikan Ekonomi FKIP Universitas Balikpapan.
- Yuliani, A. H. & I. (2006). *Faktor-Faktor Yang Mempengaruhi Kinerja Guru Matematika Dalam Pelaksanaan Kurikulum Berbasis Kompetensi (KBK) Pada Sekolah Menengah Atas Kota Palembang*. Jurnal Manajemendan Bisnis, Universitas Sriwijaya Palembang.

Kudus, Yoseph Paramata, Evi Hulukati, Novri Y. Kandowangko  
PEDAGOGICAL SKILL, PROFESSIONAL COMPETENCE AND WORK MOTIVATION:  
ITS IMPACTS ON NATURAL SCIENCE TEACHERS' PERFORMANCE IN ALL JUNIOR HIGH SCHOOLS  
IN BONE BOLANGO REGENCY, INDONESIA

---

Creative Commons licensing terms

Author(s) will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Education Studies shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflicts of interest, copyright violations and inappropriate or inaccurate use of any kind content related or integrated into the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).