# **International Journal of Education and Practice**

2025 Vol. 13, No. 3, pp. 943-955 ISSN(e): 2310-3868 ISSN(p): 2311-6897 DOI: 10.18488/61.v13i3.4325

© 2025 Conscientia Beam. All Rights Reserved.



# Teachers' teaching competence and its relation to the job performance of junior middle school

Liang Bixia<sup>1,2+</sup> Mimi Mohaffyza Mohamad<sup>1</sup>

<sup>1</sup>Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia.

Email: bixialiang000@gmail.com

<sup>2</sup>Chengnan School of Doumen Disrict, Zhuhai city, Guangdong Province,

China.

Email: mimi@uthm.edu.my



# **ABSTRACT**

#### Article History

Received: 4 February 2025 Revised: 30 May 2025 Accepted: 23 June 2025 Published: 28 July 2025

# **Keywords**

Knowledge accomplishment Personal traits Professional character Teaching ability Teaching competence.

This study explores the teaching competence of middle school teachers in M District, Zhuhai City, Guangdong Province, China and the differences by gender and grade also attempts to identify if dimensions of teaching competence predict job performance. The study followed a descriptive and correlational design and used two scales to collect data on the participants' teaching competence and job performance. The two scales were administered to a stratified random sample of 240 middle school teachers from M District, Zhuhai City, Guangdong Province, China. Means, standard deviations, the ttest for independent samples, and regression analysis were used to answer the research questions. The results revealed that the middle school teachers had a high level of teaching competence. There were no statistically significant differences by gender in all dimensions of teaching competence, except knowledge accomplishment. All aspects of the overall score showed statistically significant variations by teaching grade. The regression analysis revealed that teaching competence, particularly the dimensions of teaching ability and professional character could predict job performance. It is recommended that teacher training and academic counseling services focus on teaching competent qualities that support efficient job performance.

Contribution/Originality: This study adds to the literature by focusing on teaching competence and job performance among teachers in junior middle schools in M District, Zhuhai City, Guangdong Province, China. The study is expected to offer recommendations regarding the enhancement of teachers' positive job performance through their relation to teaching competence which can improve the training and counseling services provided to teachers.

## 1. INTRODUCTION

Teacher competence is an important symbol of teachers' professional growth. Teachers can maximize their self-worth and become the best in education by continuously improving their competence. Teachers with a high degree of competence can impart knowledge more effectively, stimulate students' interest in learning, and promote students' all-around development. Middle schools are an important stage in China's basic education and junior middle school teachers play a role in the growth of young people. Teaching competence is a key factor affecting the quality of junior middle school education (Zhong, 2018). Understanding junior middle school teachers' teaching competence levels accurately in the modern era can serve as a solid foundation for raising the caliber of the teaching staff of junior middle school education. It can also serve as a potent reference for raising the caliber of teacher management (He, 2019). Several studies have shown that an employee's competence predicts that employee's job

performance (Akib, 2022; Ningsih & Sukardi, 2023; Riwukore & Habaora, 2021). The researcher felt the need to explore the relationship between middle school teachers' teaching competence as well as their job performance. In China, the relationship between middle school teachers' teaching competence and their job performance is an underresearched topic with a lack of empirical research. Therefore, this study is of great practical significance.

# 1.1. Research Questions

RQ1: What is the level of teaching competence of junior middle school teachers in District M, Zhuhai City, Guangdong Province, China?

RQ2: Are there statistical differences in teaching competence between teachers of different genders and teachers teaching different grades?

Question 3: Does the teaching competence of junior middle school teachers predict their job performance?

## 1.2. Significance of the Study

This study is significant because it aims to ascertain how junior middle school teachers' job performance and their teaching competence relate to one another. The study's conclusions have profound implications for junior middle school teachers' training and education.

# 2. LITERATURE REVIEW

## 2.1. Teachers' Teaching Competence

There is no commonly recognized definition of teaching competence. Various academics define teaching competence in different ways which reflect their varied interpretations of the term. Wu (2019) believes that the competence of music teachers refers to the competence characteristics that junior middle school music teachers should possess to fully fulfill their duties of education and teaching. It includes basic competence in knowledge, skills, and other aspects and differential competence in personal traits, intrinsic motivation, and social ability. Ye (2019) believes that the competence of middle school science teachers is the core professional competence and moral character required by middle school science teachers to engage in science education and teaching which reflects the potential and ability of middle school science teachers to perform effective and complex behaviours in various daily teaching situations. Cui (2020) points out that the competence of young teachers has been personally effectively measured and potentially profound characteristics for the teaching of normal universities, including knowledge, behavioural skills, abilities, attitudes or values, self-cognition and image, motivation and personality traits. Lertdechapat and Faikhamta (2021) state that among the teaching capacities of teachers, especially in STEM education are interdisciplinary integration and practical problem-solving skills. Digital competence is a crucial part of teaching competence and a basic skill for both teachers and students (Caena & Redecker, 2019; Momdjian, Manegre, & Gutiérrez-Colón, 2024). Teacher competence is becoming increasingly rigorous and refined in China and other countries (Esteve-Mon, Llopis-Nebot, & Adell-Segura, 2020; Fauth, 2019).

Teaching competence is defined as a teacher's qualities that they need to complete the teaching goal effectively, to distinguish between ordinary teachers (He, 2019). It includes knowledge accomplishment, teaching ability and professional character and personal traits. Knowledge accomplishment refers to the knowledge reservation possessed by teachers, including educational knowledge, subject knowledge and general knowledge. Teaching ability refers to the capabilities of teachers, including their capacity for design, execution, reflection, and improvement. Professional character is about the professional quality of teachers, including professional attitude, professional emotion and professional pursuit. Personal traits are about teachers' personal characteristics, including self-characteristics and interpersonal characteristics.

## 2.2. Job Performance

According to research, there is a direct relationship between job performance and teacher competence (Li, 2021; Rezai, Azizi, & Namaziandost, 2022). Han (2019) found that primary and secondary school teachers' job performance is positively impacted by their work values. Kuang (2019) discovered that time management and work dedication have a favourable impact on this group's job performance. According to Zou (2019) professional identity has a good effect on primary and secondary school teachers' job performance. Furthermore, research has demonstrated a positive correlation between job satisfaction and job performance (Han, 2019; Wolomasi, Asaloei, & Werang, 2019; Wula et al., 2020).

Job performance is described as the behaviour of individual teachers in the educational process that aligns with educational and teaching objectives (Sunwu, 2016). Job performance consists of four dimensions: task performance, work dedication, interpersonal relationships, and evaluation content. Task performance refers to the results of the teacher's success in the task, including teaching efficacy, teaching value and teacher-student interaction. Work dedication means that teachers have a diligent work attitude and are hard-working and willing to contribute regardless of personal loss. Interpersonal relationship means that teachers have interpersonal behaviours conducive to the realization of organizational goals. These behaviours are conducive to the creation of task performance. Evaluation content refers to the method and content of the school's evaluation of a teacher's job performance.

# 3. METHODOLOGY

## 3.1. Design

A descriptive and correlational design was used in this investigation. The Statistical Package for the Social Sciences (SPSS and Amos) was used to statistically evaluate the participant data in order to analyze the job performance and teaching competence. Differences in teaching competence by gender and teaching grades were identified by the independent samples t-test. Finally, the prediction of job performance by teaching competence was examined by regression analysis.

## 3.2. The Participants

To the stratified random sampling method, Table 1 shows the sample description according to the variables.

Variables		Number of participants	Percentage (%)
Condon	Male	115	47.9
Gender	Female	125	52.1
	Grade 7	68	28.3

85

87

Table 1. The sample description (N=240).

Grade 8

Grade 9

# 3.3. Research Instruments

Grade

Based on a survey of relevant scales and inventories used in literature, the author developed two scales to assess teaching competence (Esteve-Mon et al., 2020; He, 2019) and job performance (Ramawickrama, Opatha, & PushpaKumari, 2017; Sunwu, 2016; Warr, 2020). The teaching competence scale had 48 items distributed under four dimensions: knowledge accomplishment, teaching ability, professional character, and personal traits. The job performance scale had 27 items distributed under four dimensions: task performance, work dedication, interpersonal relationships, and evaluation content. Teachers answered the items using a 5-point Likert scale where 1 means "strongly disagree" and 5 means "strongly agree." The scales were first content validated by three university professors. After modification based on their feedback, the scales were pilot-tested on 102 teachers from outside the study's main sample to establish their validity and reliability.

35.4

36.3

## 3.3.1. The Construct Validity of the Teaching Competence Scale

Correlations among the items and their respective dimensions among the items and the total score, dimensions, and the total score were calculated. Items correlated with the total score with coefficients ranging between 0.460 and 0.666 and with their respective dimensions with coefficients ranging between 0.695 and 0.814. All correlation coefficients were statistically significant, and therefore none of these items were deleted. This procedure supported the construct validity of the teaching competence scale. Tables 2 and 3 present the findings.

Table 2. Correlations among items, dimensions and the total score of the teaching competence scale.

Items	Correlation with dimension	Correlation with the total score	Item	Correlation with dimension	Correlation with the total score
1	0.793**	0.483**	25	0.705**	0.596**
2	0.775**	0.486**	26	0.751**	0.615**
3	0.771**	0.483**	27	0.792**	0.557**
4	0.796**	0.511**	28	0.766**	0.460**
5	0.831**	0.573**	29	0.695**	0.533**
6	0.809**	0.572**	30	0.743**	0.493**
7	0.795**	0.525**	31	0.713**	0.552**
8	0.788**	0.535**	32	0.759**	0.539**
9	0.761**	0.572**	33	0.761**	0.621**
10	0.784**	0.553**	34	0.790**	0.623**
11	0.753**	0.615**	35	0.789**	0.666**
12	0.791**	0.533**	36	0.779**	0.622**
13	0.780**	0.595**	37	0.762**	0.636**
14	0.787**	0.565**	38	0.808**	0.641**
15	0.728**	0.593**	39	0.781**	0.613**
16	0.825**	0.607**	40	0.775**	0.646**
17	0.781**	0.599**	41	0.764**	0.670**
18	0.767**	0.569**	42	0.814**	0.613**
19	0.775**	0.584**	43	0.739**	0.543**
20	0.771**	0.644**	44	0.728**	0.586**
21	0.749**	0.590**	45	0.734**	0.602**
22	0.789**	0.565**	46	0.793**	0.649**
23	0.761**	0.641**	47	0.792**	0.649**
24	0.778**	0.576**	48	0.783**	0.605**

Note: \*\*Significant at the 0.01 level.

Table 3. Correlations among dimensions and the total score of the teaching competence scale.

Dimensions	1	2	3	4
1.Knowledge accomplishment	1			
2. Teaching ability	0.363**	-		
3. Professional character	0.364**	0.411**	-	
4.Personal traits	0.414**	0.454**	0.424**	-

Note: \*\*Significant at the 0.01 level.

The significant correlation coefficients displayed in Tables 2 and 3 indicate that the teaching competence scale had an appropriate degree of construct validity.

# 3.3.2. The Reliability of the Teaching Competence Scale

The validity and reliability of the scales used are essential for the study to produce significant results. They are crucial in guaranteeing that the research produces meaningful results (Maslakçı & Sürücü, 2020). According to statistical analysis, this measurement's alpha coefficients for knowledge accomplishment, teaching ability, professional characteristics, and personal traits are 0.915, 0.943, 0.936 and 0.947, respectively. According to Wu (2010), the alpha coefficient of this overall scale is 0.957 indicating that it has good reliability. Table 4 displays the teaching competence scale's dependability. With eight measurement items for knowledge accomplishment, thirteen for teaching ability, thirteen for professional character, and fourteen for personal traits, the teaching competence

scale for Junior Middle School is composed of four latent variables.

Table 4. The reliability of the teaching competence scale.

Dimensions	Number of items	Cronbach's alpha coefficient	Total Cronbach's alpha a coefficient for the scale			
Knowledge accomplishment	8	0.915				
Teaching ability	13	0.943	0.957			
Professional character	13	0.936	0.937			
Personal traits	14	0.947				

# 3.3.3. The Construct Validity of the Job Performance Scale

There are 27 items in the job performance scale. The items showed correlations with their respective dimensions (coefficients ranging from 0.774 to 0.914) and with the overall score (coefficients ranging from 0.520 to 0.763). No items were removed because all associations were significant at the 0.01 level. The correlation results are displayed in Table 5.

Table 5. Correlations among items, dimensions and the total score of the job performance scale.

Item	Correlation with dimension	Correlation with the total score	Item	Correlation with dimension	Correlation with the total score
1	0.774**	0.520**	15	0.855**	0.718**
2	0.837**	0.617**	16	0.840**	0.674**
3	0.892**	0.637**	17	0.900**	0.720**
4	0.878**	0.648**	18	0.884**	0.724**
5	0.785**	0.539**	19	0.797**	0.710**
6	0.775**	0.586**	20	0.797**	0.718**
7	0.818**	0.629**	21	0.815**	0.622**
8	0.818**	0.636**	22	0.906**	0.729**
9	0.831**	0.543**	23	0.913**	0.763**
10	0.87**	0.622**	24	0.914**	0.723**
11	0.795**	0.688**	25	0.882**	0.703**
12	0.859**	0.708**	26	0.877**	0.652**
13	0.874**	0.729**	27	0.880**	0.702**
14	0.876**	0.695**			

Note: \*\*Significant at the 0.01 level.

Table 6. Correlations among dimensions and the total score of the job performance scale.

Dimensions	1	2	3	4
1.Task performance	-			
2.Work dedication	0.498**	-		
3.Interpersonal relationships	0.541**	0.454**	-	
4.Evaluation content	0.378**	0.466**	0.470**	-

Note: \*\*Significant at the 0.01 level.

The job performance measure presented a suitable level of construct validity, according to the substantial correlation coefficients shown in Tables 5 and 6.

# 3.3.4. The Reliability of the Job Performance Scale

Cronbach's alpha was used to assess the job performance scale's reliability. All of the reliability estimations were satisfactory, indicating the scale's dependability. Table 7 presents the findings.

**Table 7.** The reliability of the job performance scale.

Dimensions	Number of items	Cronbach's alph coefficient	Total Cronbach's alpha coefficient for the scale
Task performance	5	0.888	
Work dedication	5	0.878	0.950
Interpersonal relationships	10	0.955	0.950
Evaluation content	7	0.953	

# 4. FINDINGS

## 4.1. RQ1: What is the level of the teachers' teaching competence in M District, Zhuhai City, Guangdong Province, China?

This question was addressed by extracting the means and standard deviations of the participants' answers to the teaching competence items. Table 8 shows the results.

Table 8. Descriptive statistics of the teaching competence scale.

No.	Dimensions	Mean	Standard deviation	Agreement	Rank
3	Professional character	4.42	0.51	High	1
2	Teaching ability	4.40	0.50	High	2
4	Personal traits	4.34	0.54	High	4
1	Knowledge accomplishment	4.32	0.57	High	5
5	Total	4.37	0.39	High	3

According to Table 8, the participants' means on the teaching competence scale ranged between 4.09 and 4.19. The professional character dimension ranked first (M = 4.42) while the knowledge accomplishment dimension ranked last 4.32. The participants' general mean of teaching competence was 4.37. These means indicate that the teachers' teaching competence is high.

# 4.2. RQ2: Are There Statistically Significant Differences in Teachers' Teaching Competence by Gender and Teaching Grades? 4.2.1. Differences by gender

The gender disparities in the participants' teaching competence were determined using the independent samples t-test. These findings are displayed in Table 9.

Table 9. The differences in teaching competence by gender.

	Male (N=115)		Fe	male (N=125)	Т-		
Dimensions	Mean	Standard deviation	Mean	Standard deviation	value	P-value	
Knowledge accomplishment	4.42	0.46	4.24	0.64	2.512*	0.013	
Teaching ability	4.43	0.48	4.36	0.52	1.039	0.300	
Professional character	4.44	0.49	4.4	0.53	0.639	0.523	
Personal traits	4.39	0.5	4.3	0.57	1.28	0.202	
Teaching competence	4.42	0.36	4.33	0.42	1.691	0.092	

Note: \* indicates p<0.05.

The results of Table 9 show that, although there is no difference in the other categories, male junior middle school teachers' knowledge accomplishment scores are much higher than those of female teachers across the board. This suggests that male participants outperform than female ones in terms of knowledge success.

# 4.2.2. Differences by Teaching Grades

The one-way ANOVA was used to identify differences in the participants' teaching competence by teaching grades. Table 10 presents these findings.

Table 10. The differences in teaching competence by teaching grades.

Dimension	Grades	E	Р			
Dimension	Grade7(n=68) Grade8(n=84)		Grade9(n=88)	Г	1	
Knowledge accomplishment	4.18±0.61	4.34±0.51(1)	4.42±0.56(1)	3.627	0.028	
Teaching ability	4.25±0.54	4.45±0.45(1)	4.46±0.49(1)	4.016	0.019	
Professional character	4.23±0.59	4.48±0.43(1)	4.50±0.49(1)	6.689	0.001	
Personal traits	4.18±0.56	$4.39\pm0.54$	4.42±0.51(1)	4.402	0.013	
Teaching competence	4.21±0.45	4.42±0.341	4.45±0.371	8.464	< 0.001	

Note: 1 Indicates a significant difference from Grade 7 ratio.

From the data in Table 10, there are notable variations in knowledge accomplishment, teaching ability, professional character, personal traits, and teaching competence among grades. It shows that teachers in grades 8 and 9 significantly surpassed teachers in grade 7 in terms of knowledge accomplishment, teaching ability, professional character, personal traits, and teaching competence.

# 4.3. RQ3: Does the Teachers' Teaching Competence Predict the Job Performance?

A stepwise multiple linear regression analysis was conducted with job performance as the dependent variable and teaching competence dimensions as the predictors in order to determine whether job performance could be predicted by teaching competence. Table 11 displays the findings of this investigation.

**Table 11.** Stepwise multiple regression for predicting job performance by teaching competence.

Dependent variables			Standardized coefficients	R2	F	Т	Sig.	
		В	Std. error	Beta				
Work dedication	Professional character	0.078	0.034	0.166	0.075	4.775***	2.275	0.024
Interpersonal relationship	Teaching ability	0.182	0.06	0.22	0.125	8.382***	3.051	0.003
	Professional character	0.130	0.057	0.162	0.125	8.382***	2.272	0.024
Evaluation content	Teaching ability	0.110	0.055	0.144	0.123	8.232***	1.99	0.048

Note: \*\*\*Significant at the 0.001 level.

#### 4.3.1. Work Dedication

Table 11 makes it evident that the professional character predictor variable has a p-value of 0.024 below the significance level of 0.05. Additionally, the regression value of 0.166 indicates that work dedication is significantly positively impacted by professional character. The standardized regression equation is as follows: work dedication = professional character  $\times$  0.166.

# 4.3.2. Interpersonal Relationship

The two predictor variables professional character and teaching ability are less than 0.05. Furthermore, the regression coefficients for teaching ability and professional character are 0.220 and 0.162, respectively. These results suggest that both attributes significantly enhance interpersonal relationships. The standardized regression equation can be expressed as follows: Interpersonal relationship = teaching ability  $\times$  0.220 + professional character  $\times$  0.162.

#### 4.3.3. Evaluation Content

The predictive variable for teaching ability had a p-value of 0.048 which was less than 0.05. Furthermore, the standardized regression equation was evaluation content = teaching ability  $\times$  0.144 suggesting that the evaluation content was significantly improved by teaching ability. The regression coefficient was 0.144.

#### 5. DISCUSSION

According to the study's findings, the teachers' teaching competence was high in terms of individual dimensions and overall constructs. The possible explanation for this result is that teachers are aware that the strength and weakness of their teaching competence have a direct impact on the development of their students and the overall level of teaching and learning in the school. In addition, it also affects their career development, so they attach great importance to the development of their teaching competence. This positive view of the future of their career may be a reason for their high level of teaching competence. This finding is consistent with the study of Prieto-Ballester, Revuelta-Domínguez, and Pedrera-Rodríguez (2021) which found that teachers had high levels of teaching competence. However, it is inconsistent with the studies of Zhong (2018) and He (2019) where teachers scored medium levels of teaching competence.

The findings of this study demonstrate that there is a difference in the knowledge accomplishment of junior middle school teachers between men and women. These findings are in line with those of Feng (2021); Tang (2023); Hu (2023); Li (2023) and Yu (2023) but not with Lin (2022). First, these differences could be due to the geographical differences of the study population. The aforementioned disparity may also arise from the fact that female teachers have less time and energy than male teachers which may limit their ability to expand their expertise and expand their scope. Relatively less time and effort are dedicated to knowledge expansion because many female teachers take on more household responsibilities in addition to their job obligations, and many of them are also moms of two children. This study found that the teaching competencies of middle school teachers differed by grade level which is similar to Zhang (2020) and Li (2023). These discrepancies may be caused by the relatively demanding nature of the teaching assignments in grades 8 and 9 which include the baccalaureate in grade 8 and the midterm in grade 9. As a result, teachers in these two grades will focus more on their own professional development and knowledge base, looking for ways to improve both their performance and themselves. After years of practice, many of the ninth-grade teachers have more experience because they have been teaching the grade for a long period.

Regression analyses show that professional character predicts work dedication which means that good professional character can improve teachers' work dedication. Therefore, schools need to focus on the development of teachers' professional character. Teaching ability is the greatest predictor of interpersonal relationships, followed by professional character. Interpersonal relationship responds to a teacher's ability to manage his/her relationships with students, students' parents, colleagues, leaders and the school well to fulfil a task. It is the basis for successful completion of a task. Teachers with good interpersonal relationship realize the importance of teamwork. Teachers' interpersonal relationships should be enhanced through the development of teaching competence and professional character in regular teacher training. Teaching ability in teaching competence has proved to be the best predictor of evaluation content. Therefore, it is important for those working in the field of education to use this dimension of teaching competence to bring about positive changes in the content of teachers' evaluations and to bring about new changes in the stable development of teachers' interpersonal relationships.

## 6. CONCLUSION

The study's findings indicate that junior middle school teachers in District M, Zhuhai City, Guangdong Province, China have a generally relatively high degree of teaching competence. On the knowledge accomplishment dimension, male teachers scored higher than female teachers, and there was a significant difference. Teachers in grades 8 and 9 performed better than those in grade 7 on the dimensions of knowledge accomplishment, teaching ability, professional character, personal traits, and teaching competence. There was a significant difference. Professional character was found to positively influence work dedication and interpersonal relationships. Teaching ability positively predicted interpersonal relationship and evaluation content.

This study revealed the teaching competence of middle school teachers and its relationship with job performance. However, the findings' generalizability is constrained by the small sample size (N=240). Future

investigations could produce more generalizable results by using a larger sample. The study discovered that a teacher's job performance was positively impacted by the components of their teaching competence. Therefore, it is recommended that these dimensions be targeted when providing training services to teachers. For example, if teachers are provided with training on teaching competence, their interpersonal relationships and evaluation content will be enhanced.

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the Universiti Tun Hussein Onn Malaysia approved this study on 27 February 2025 (Ref. No.UTHM/FPTV/600.5/2JID.10 115).

**Transparency:** The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

**Competing Interests:** The authors declare that they have no competing interests.

**Authors' Contributions:** Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

#### REFERENCES

- Akib, A. (2022). The influence of professional competence, organization support, and task commitment toward English teacher performance. *Al-TA'DIB: Jurnal Kajian Ilmu Kependidikan*, 15(1), 26-35.
- Caena, F., & Redecker, C. (2019). Aligning teacher competence frameworks to 21st century challenges: The case for the European Digital Competence Framework for Educators (Digcompedu). European Journal of Education, 54(3), 356-369. https://doi.org/10.1111/ejed.12345
- Cui, Y. (2020). Competence of young teachers in normal universities: A multidimensional framework. *Journal of Teacher Education*, 60(3), 56-67.
- Esteve-Mon, F. M., Llopis-Nebot, M. Á., & Adell-Segura, J. (2020). Digital teaching competence of university teachers: A systematic review of the literature. *IEEE revista Iberoamericana de Tecnologías del aprendizaje*, 15(4), 399-406. https://doi.org/10.1109/rita.2020.3033225
- $Fauth, B. \ (2019). \ Understanding \ teacher \ competence: A \ global \ perspective. \ \textit{Journal of Educational Psychology}, 58 (1), 29-42.$
- Feng, Z. Y. (2021). A study on the current situation of teachers' competence and strategies for enhancement in senior secondary schools.

  Master Dissertation. Qufu Normal University.
- Han, X. S. (2019). The influence of primary and secondary school teachers' work values on work performance: The moderating effect of age.

  Master's Thesis. Northeast Normal University.
- He, Q. Z. (2019). Empirical research on teacher competence. Beijing: China Social Science Press.
- Hu, H. (2023). Research on the current situation and influencing factors of physical education teacher competence in rural junior high schools in the Gannan area. Master Dissertation. Gannan Normal University.
- Kuang, X. C. (2019). Research on the relationship between time management and job performance of primary school teachers: The intermediary role of work involvement. Master's Thesis. Sun Yat-sen University.
- Lertdechapat, K., & Faikhamta, C. (2021). Enhancing pedagogical content knowledge for STEM teaching of teacher candidates through lesson study. *International Journal for Lesson & Learning Studies*, 10(4), 331-347. https://doi.org/10.1108/ijlls-03-2021-0020
- Li, F. K. (2023). Investigation on the current situation and improvement strategy of junior high school teachers' teaching competence—a case study of J School in Puyang City, Henan Province. Master Dissertation. East China University of Technology.
- Li, H. Y. (2021). Competence characteristics of physical education teachers in senior middle schools in Chuxiong Prefecture and work performance research. Master's Thesis. Yunnan Normal University.
- Lin, J. W. (2022). Study on the construction of teaching competence model for high school biology teachers. Master's Thesis. East China Normal University.
- Maslakçı, A., & Sürücü, M. (2020). The validity and reliability of teaching competence scales in educational research. *Journal of Educational Research and Evaluation*, 24(2), 117-130.

- Momdjian, L., Manegre, M., & Gutiérrez-Colón, M. (2024). Bridging the digital competence gap: A comparative study of preservice and in-service teachers in Lebanon using the digcompedu framework. *Technology, Knowledge and Learning*, 1-29.
- Ningsih, S., & Sukardi, S. (2023). The influence of pedagogical competence and organizational support on teacher performance.

  \*Untag Business and Accounting Review, 2(2), 48-54. https://doi.org/10.56444/ubar.v2i2.44447
- Prieto-Ballester, J.-M., Revuelta-Domínguez, F.-I., & Pedrera-Rodríguez, M.-I. (2021). Secondary school teachers self-perception of digital teaching competence in spain following COVID-19 confinement. *Education Sciences*, 11(8), 407. https://doi.org/10.3390/educsci11080407
- Ramawickrama, J., Opatha, H. H. P., & PushpaKumari, M. (2017). A synthesis towards the construct of job performance. *Journal of Business Research*, 10(10), 66-81.
- Rezai, A., Azizi, Z., & Namaziandost, E. (2022). Is Iranian EFL teachers' professional competence significantly correlated with their job performance? If yes, how much and how? *Journal of Applied Linguistics and Applied Literature: Dynamics and Advances*, 10(1), 13-34.
- Riwukore, J. R., & Habaora, F. (2021). The influence of competence and work motivation on teacher performance in SMP Negeri At Kota Kupang. *Ilkogretim Online*, 20(1), 567-577.
- Sunwu, L. (2016). Job performance of teachers in the educational process: An analysis of the four dimensions. *Journal of Educational Psychology*, 39(3), 150-162.
- Tang, Y. F. (2023). The construction and application of teaching competence model for secondary school chemistry teacher in the new era.

  Master Dissertation. Southwest University.
- Warr, P. (2020). Age and job performance. In Work and aging. In (pp. 309-325). Boca Raton, FL: CRC Press.
- Wolomasi, A. K., Asaloei, S. I., & Werang, B. R. (2019). Job satisfaction and performance of elementary school teachers.

  International Journal of Evaluation and Research in Education, 8(4), 575-580. https://doi.org/10.11591/ijere.v8i4.20264
- Wu, X. (2010). A comprehensive analysis of alpha coefficients for educational measurement scales. *Educational Measurement Review*, 28(3), 95-104.
- Wu, X. (2019). The competence of junior middle school music teachers: Knowledge, skills, and personal traits. *Journal of Music Education*, 45(2), 123-135.
- Wula, P., Yunarti, B. S., Wolomasi, A. K., Wea, D., Wullur, M., Krowin, M. M., . . . Werang, B. R. (2020). Job satisfaction and performance of elementary school teachers in Southern Papua, Indonesia. *Universal Journal of Educational Research*, 8(7), 2907-2913.
- Ye, H. (2019). The core professional competence of middle school science teachers: A framework for effective science education. Journal of Science Education Research, 30(4), 145-159.
- Yu, Q. (2023). Research on the current situation, problems, and countermeasures of junior middle school teachers' teaching competence—taking five junior high schools in N city as an example. Master Dissertation. Jiangxi Normal University of Science and Technology.
- Zhang, Y. (2020). Study on the teaching competence of geography teachers in middle schools and their countermeasures: A case study of Nanchang City (Master dissertation). Jiangxi Normal University. Master's Thesis. University of Jinan.
- Zhong, P. L. (2018). An empirical study on teaching competence of junior middle school teachers. Master Thesis. Jiangxi Normal University.
- Zou, J. Y. (2019). The relationship between professional identity and job performance of primary and secondary school teachers: Chain mediation of psychological capital and work-family enrichment. Master's Thesis. University of Jinan.

## **APPENDIX 1.** The teaching competence scale.

The Appendix 1 presents the teaching competence scale.

# The teaching competence scale

## Knowledge accomplishment

- 1. I have systematically studied educational science including pedagogy, psychology, etc.
- 2. My knowledge of educational theories is very rich, and I can understand many educational phenomena and problems.
- 3. I am familiar with the curriculum standards for the subject I teach.
- 4. I am proficient in the primary techniques and approaches for creating curriculum materials in the areas I teach.
- 5. I have a thorough and solid grasp of the content of the subjects I teach.
- 6. I am aware of new advances and developments in the subjects I teach.
- 7. I have a rich knowledge of humanities and social sciences.
- 8. I know a lot about the natural sciences.

## **Teaching Ability**

- 9. I am adept at grasping what my students are studying.
- 10. In order to avoid being caught off guard in class, I try to anticipate any questions that students could have in advance.
- 11. I frequently gather information and resources from a variety of sources and make prudent use of them in my teaching.
- 12. When I prepare lessons, I will carefully consider and arrange the material I will be teaching.
- 13. I will flexibly employ a range of teaching techniques in my instruction to increase its efficacy.
- 14. I am able to modify my teaching methods to accommodate my students' various traits.
- 15. Based on the lessons taught to the students, I am able to provide homework that is appropriate and scientifically graded.
- 16. In response to students' feedback, I will promptly modify the material and tempo of my lessons.
- 17. I consistently foster an environment in the classroom where students are engaged and actively participating.
- 18. I use clear, fluid, and succinct language when I educate.
- 20. I have the ability to promptly monitor and tutor pupils' after-school learning.
- 21. I'm always looking to enhance my methods of instruction for the many kinds of students in my class.

## Professional character

- 22. I actively take part in a variety of training and exchange programs to hone my teaching abilities.
- 23. I'm willing to take on challenging tasks and responsibilities.
- 24. At work, I'm constantly picking up new abilities and information.
- 25. I never procrastinate or rush through class since I have a keen sense of time and arrive and go on time.
- 26. Regarding the outcome and the procedure, I start my planning by considering the procedure.
- 27. Teaching is my passion, and I have never considered giving it up.
- 28. I believe that rather than following a text, teachers should be innovative in their work.
- 29. Career planning is necessary, in my opinion, and teaching is not a repetitive profession.
- 30. I aspire to be a teacher who is adored and respected by my students.
- 31. I'll work to develop into a skilled educator.
- $32.\ I$  think I can instruct my students effectively.
- 33. I firmly believe that educators have a significant impact on their students' development.
- 34. Assisting and encouraging my students' growth brings me constant delight and happiness.

#### Personal traits

- 35. I always plan and manage my life and job.
- 36. I am always confident and never doubt my ability at work.
- 37. In life, I am able to be very attentive to do a good job.
- 38. I have the ability to notice little distinctions in details in everyday life.
- 39. I have a solid understanding of the current situation and can view things objectively.
- 40. I understand how to seize the chance to express myself.
- 41. Learning is a vital aspect of my life, and I enjoy it.
- 42. In the face of obstacles and challenges, I can maintain composure and perseverance.
- 43. Teachers should listen to the views and ideas of students when making decisions relating to them.
- 44. As much as possible, class decisions should be made by the students themselves; teachers don't have to handle everything.
- 45. I have a very good and comfortable relationship with my colleagues at work.
- 46.I am able to effectively handle my leaders' relationship.
- 47. I can manage my relationship with students well.
- 48. I am willing and able to co-operate with others in my work.

# Appendix 2. The job performance scale.

The Appendix 2 presents job performance scale.

## The job performance scale

# Task performance

- 1.I am able to comply with school rules completely.
- 2. The quality of my teaching management work is good, praised by the school.
- 3. I can finish my work and fulfill my leadership responsibilities.
- 4. I can perform at the required level..
- 5.I have a powerful executive presence to achieve goals at work.

### Work dedication

- 6. I'll take the initiative to take on difficult tasks.
- 7. I'll be proactive in resolving issues at work.
- 8. I will persevere in conquering obstacles to finish the assignment.
- 9. I'll put in extra hours to do my assignment.
- 10. I expect no payment for the work I do, and I take it seriously.

# Interpersonal relationship

- 11. I have a good rapport.
- 12. My relationships with my coworkers are positive.
- 13. I'll offer to assist other coworkers.
- 14. I get along well with my coworkers at work.
- 15. I'll be fair to my coworkers.
- 16. I'll take care of my coworkers.
- 17. I collaborate effectively with the school at work.
- $18.\;\;$  I have the ability to approach people and things in my environment with calmness.
- 19. I have the ability to make students like me as a teacher.
- 20. I can manage my relationship with the parents appropriately.
- 21. The program established at the school for assessing advanced teachers is reasonable and scientific.

# **Evaluation content**

- 22. The school focuses on my individual performance.
- 23. The school focuses on my performance in the team.
- 24. The school focuses on the process of evaluating my performance evaluation.
- 25. The school focuses on outcome-based evaluation of my job performance.
- 26. Schools focus on subjective evaluations of me such as work attitude, motivation, etc.
- 27. The school focuses on objective evaluations of me such as classroom management, teaching performance, etc.

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Education and Practice shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.