TADBIR JURNAL STUDI MANAJEMEN PENDIDIKAN

http://journal.iaincurup.ac.id/index.php/JSMPI
DOI: http://dx.doi.org/10.29240/jsmp.v7i1.5652

The Effect of Teacher Professional Competence on Student Learning Achievement at MAN 3 Tangerang

Abdul Wahid
Universitas Islam Negeri (UIN) Syarif Hidayatullah Jakarta
abdulwahid@uinjkt.ac.id

Siti Asiah
Universitas Islam 45 (UNISMA) Bekasi
sitiasiah@unismabekasi.ac.id

Miftahul Huda
Universitas Nahdlatul Ulama (UNU) Cirebon
miftahul1991@gmail.com

Arkam Lahiya
Institut Agama Islam (IAI) Muhammadiyah Kotamobagu
arkaml2017@gmail.com

Najamuddin Petta Solong
Institut Agama Islam Negeri (IAIN) Sultan Amai Gorontalo
uddinpettasolong@iaingorontalo.ac.id

Abstract: *This study aims to analyze the effect of teacher professional competence on student learning achievement at MAN 3 Tangerang and to determine to what extent teacher professional competence influences student learning achievement. In this study, the researchers applied a quantitative approach with a survey method and employed simple linear regression in answering the hypothesis. Data were collected using a questionnaire, in which samples were selected using a simple random sampling technique, resulting in 170 students. The questionnaire applied a Likert scale with four alternative answers. Based on the results of data processing and calculation using SPSS v. 22, statistical testing indicated that Ho was rejected and Ha was accepted, meaning that teacher professional competence significantly influences student learning achievement. It was derived from the results of the t-test presenting a t-count of 6.682 which is > t-table (i.e., 1.974) with a significance value of 0.000 (< 0.05 or 5%). Furthermore, the results in ANOVA also supported the acceptance of Ha, in which the obtained value of significance was 0.000 (< 0.05). Therefore, this study revealed that teacher professional competence influences student learning achievement. Moreover, the results of the coefficient of determination showed that the variable of teacher professional competence can explain the variable of student learning achievement by 20%. Meanwhile, the remaining 80% is explained by other variables not examined in this study.*

Keywords: *Teacher Professional Competence; Learning achievement; Students*.

INTRODUCTION

Education is an important component of one's life (Mirowsky & Ross, 2017). Education can shape a person to be intelligent, broad-minded, and highly

knowledgeable. It can also make someone have a polite and courteous attitude (Idris et al., 2022; Idris & Mokodenseho, 2021; Wekke et al., 2017). This is in line with Indonesia's Law No. 20/2003 concerning the National Education System. Chapter 1 Article 1 Paragraph 1 of the law explains that education is a conscious and planned effort to create a learning atmosphere and learning process so that students may actively develop their potential to have spirituality, religiosity, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, and nation. The importance of the function of education is manifested in teaching and learning activities. These activities aim to form students to excel in learning. Transforming students to have high learning achievement will be able to shape the quality of graduates in educational institutions.

Student learning achievement is an important factor in achieving educational output because it is the result of a teacher's assessment of student performance after going through the learning process (Kemethofer et al., 2022). The success of student learning achievement is influenced by various factors both internal and external (Zilka et al., 2022). Internal factors come from within students which include learning methods, interests, motivation, and health, while external factors come from outside students which include support from parents (family), school environment, and community.

Good student learning achievement will provide many benefits for the school (Bono et al., 2022). One of them is to bring a good impression to the school. If the schools have many students who excel in learning, the schools can easily send or register their students to any tournament at both national and international levels. In addition, the management board of the school will certainly be more confident because they get a good assessment from society. Moreover, their alumni will have a great opportunity to be accepted into well-known universities. As a result, schools that have a myriad of achievements automatically become favorite schools among the wider community because the implemented learning process can deliver students the way of learning that each student is interested in. However, low student learning achievement still occurs in Indonesia to date. This is based on the results of the PISA (The Program for International Student Assessment) in 2018 which showed that Indonesian student achievement in literacy, science, and mathematics was in the bottom 10 of the 79 countries surveyed (Varagur, 2019). In addition, based on data from World Population Review in 2021, Indonesia's education level is ranked 54th out of a total of 78 countries included in the world education level ranking (Arifa, 2022).

One of the important components of education that can be a major problem for the failure or success of education, especially in the learning

process, is the role of the teacher (Al Issa et al., 2022; Aas, 2022). It is important because teachers have a role in the development of education, especially those implemented at the school level (Mueller, 2022). In addition, the teacher is also a very influential component in the creation of quality learning processes and outcomes. For this reason, the role of a teacher must receive central and primary attention in the education system and learning process.

In the learning process, teachers have an important role, especially in the achievement of student success (Wekke et al., 2018). This condition requires a teacher to have several competencies in teachings, such as teaching skills, material mastery, use of teaching methods, and maturity in action (Idris et al., 2021). This can be seen from the abilities of a teacher to regulate the course of learning that involves students when lessons take place in the classroom, to collaborate with students, and to make the learning atmosphere more fun, effective, and orderly (Mokodenseho & Wekke, 2017; Wekke & Mokodenseho, 2017). These abilities can make students more active in the learning process. Unfortunately, the competence of teachers in Indonesia is considered poor. Based on data from Indonesia's Ministry of Education, Culture, Research, and Technology, the average result of teacher competence is 50.64 (Pradewo & Setiawan, 2021). Based on these data, teachers are one of the main problems in improving the achievement or quality of education in Indonesia. Thus, teachers are expected to improve their competence.

In Indonesia's Minister of National Education Regulation No. 16/2007 concerning Academic Qualification Standards and Teacher Competencies, teacher competence must be fully developed from four main competencies: pedagogic competence, personality competence, social competence, and professional competence. All of these competencies are interconnected with one another.

The professional competence of teachers plays an important role in improving student learning achievement, as illustrated by the definition of professional teachers saying that they are a determining factor in the quality education process. The role of a teacher in improving the quality of student learning outcomes is huge, in which the role may affect over 50% of the quality of student learning outcomes. To be able to become professionals, they must be able to find their identity and actualize themselves according to the abilities and rules of professional teachers (Nurzaman, 2021). A teacher who is professional in teaching can motivate students to learn within and outside the classroom. In addition, professional teachers must be able to build students' interests, abilities, and potential in the learning process.

Teachers can be considered to be professional if they can become experts in the material & its structure, have scientific concepts & mindsets that support the lessons being taught, and master the competency standards & basic competencies of the subjects being taught. In addition, they have to develop learning materials that are taught creatively, improve professionalism sustainably by taking reflexive actions, and utilize ICT to communicate and develop themselves (Maulida, 2022; Idris et al., 2020). Professional competence is very important for being possessed by teachers to be applied in schools. Furthermore, it is also needed in a good learning process, making students keep being motivated to learn. Eventually, students will excel in school. However, professional teachers cannot only implement learning strategies, present the material in a good and fun way, and be oriented to the completeness of the learning process but also must pay attention to the process of growth and development of the potential of students which includes affective, cognitive, and psychomotor aspects.

Various problems in education also occur in the research location, namely MAN 3 Tangerang. This school is still facing obstacles in the teaching and learning process even though this school is one of the leading schools accredited A with a myriad of academic achievements, such as in the National Science Olympiad (Indonesian: *Olimpiade Sains Nasional* (OSN)), Madrasah Science Competence (Indonesian: *Kompetensi Sains Madrasah* (KSM)), International Science Olympiad (Indonesian: *Internasional Olimpiade Sains* (IOS)), National Science Competition (Indonesian: *Kompetisi Sains Nasional* (KSN)), and Online Madrasah Science Competition (Indonesian: *Kompetisi Sains Madrasah Online* (KSMO)). In addition, non-academic achievements include *Kepalang Merahan* (KPM), GAPRES in the levels of Jakarta, West Java, and Banten, GPPCI, LKBB, Pencak Silat, robotics, MTQ, MFQ, choir, and futsal. With all these achievements, MAN 3 Tangerang in learning methods still uses conventional learning systems, such as lecturing in which teachers are more active in the learning process than students. Furthermore, the level of teacher professional competence is still low in this school as seen in the lack of teacher discipline in the learning process (e.g., the teacher coming not on time), the lack of mastery of the teaching materials possessed by the teacher, and the lack of teacher ability in managing class activities so that they are confused to determine effective learning media. These things have an impact on the process of learning activities that are less fun, making students easily feel bored in learning. Therefore, to improve the quality of these schools, it is necessary to make efforts to upgrade the competence of teachers to the professional level to achieve better student learning achievements.

From the academic argument presented above, this study focuses on the professional competence of teachers. For this reason, this study aims to analyze the effect of teacher professional competence on student learning achievement. The important contribution of this study is to reveal whether the professional competence of teachers affects the learning achievement of students at MAN 3 Tangerang.

RESEARCH METHODS

This study was conducted at MAN 3 Tangerang employing a quantitative approach with a survey method. The population in this study was all students of class XI for the academic year 2021/2022, totaling 297 students. From this population, 170 students became research samples determined using the Slovin formula. In collecting accurate data, researchers used questionnaires. For quantitative analysis, the researchers applied the 4-point Likert scale to obtain interval data. Furthermore, the weight values in the Likert scale are as follows.

Table 1. Weight Values on the Likert Scale

Response Options	Weight Value
Always	4
Often	3
Sometimes	2
Never	1

The instrument used in collecting data was a questionnaire. There were two variables in this study, namely Variable X (Teacher Professional Competence) and Variable Y (Student Learning Achievement). At first, the researchers analyzed the instrument through validity and reliability tests. To determine the level of validity, the researchers employed the product moment formula as follows.

$$r_{hitung} = \frac{n(\Sigma XY) - (\Sigma X)(\Sigma Y)}{\sqrt{[n\Sigma X^2 - (\Sigma X)^2\ (n\Sigma Y^2 - (\Sigma Y)^2]}}$$

Where:

r_{count} : Pearson's correlation coefficient for the instrument item towards the variable in question
$\sum X$: The score of the instrument item
$\sum Y$: The score of all instrument items in the variable
N : Number of respondents in the instrument trial

The basis for making decisions on the validity test was by comparing the *p*-value with the level of significance used (i.e., 5%). If the *p*-value is less than

0.05, then the item is valid. Conversely, if the *p*-value is less than 0.05, then the item is invalid.

Meanwhile, concerning testing the reliability of this research instrument, the researchers used Cronbach's alpha technique. The formula is as follows.

$$r_{11} = \left[\frac{k}{k-1}\right] - \left[\frac{\Sigma \alpha_b{}^2}{\alpha_t{}^2}\right]$$

Where:

r_{11} : Instrument reliability
k : The number of items
$\Sigma a_b{}^2$: The number of item variants
$a_t{}^2$: Total variants

A research instrument is reliable in this technique if the reliability coefficient is greater than 0.6.

The collected data in this study were processed through data checking, data selection, data classification, and data tabulation. After the data collection process was done and the required data had been collected completely, data analysis was carried out. Data analysis aims to group, categorize, and convert raw data into something that can answer the research hypothesis. The hypotheses of this research are as follows.

1. The Alternative Hypothesis (Ha)

   There is a significant relationship between the professional competence of teachers and the learning achievement of students.

2. The Null Hypothesis (Ho)

   There is no significant relationship between the professional competence of teachers and the learning achievement of students.

Several data analysis techniques were used in this study. The first was descriptive analysis to describe the data obtained systematically related to facts and phenomena in the field. In this analysis, the researchers conducted the measurement of central phenomena, such as mean, mode, median, standard deviation, lowest value, highest value, standard error, and others. The second was the classical assumption testing consisting of normality and linearity tests. The third was the hypothesis testing consisting of simple linear regression analysis, partial test (t-test), and coefficient of determination (R^2).

LITERATURE REVIEW

Student Learning Achievement

Sahin & Yilmaz (2020) define achievement in education as evidence of student performance in learning activities. Meanwhile, according to Arifin in Rosyid et al. (2019), the achievement is something related to aspects of knowledge. In addition, Rosyid et al. (2019) define achievement in terms of meaning, namely having a tendency towards good and positive results. In other words, achievement must be achieved with maximum effort in learning. In line with that, Suryabrata in Julianti (2022) equates achievement as the value or result of the learning process. Meanwhile, the term "learning" can be broadly defined as a psycho-physical activity leading to complete personal development. In a narrow sense, "learning" can be defined as an effort to master science material which is part of the activity to achieve the establishment of a complete personality. Darman (2020) proposes several interpretations related to the term "learning". First, learning is a process of modifying or reinforcing behavior through experience. Second, learning is a process of changing individual or group behavior through interaction with the surrounding environment. From these various definitions, Leithwood & Jantzi (2007) combine the term "achievement" and "learning" into "learning achievement". If it is associated with students, it can be interpreted as the abilities possessed by students after going through the process of learning experiences inside and outside the classroom.

Gagne in Restian (2020) distinguishes learning achievement into five aspects: intellectual abilities, cognitive strategies, verbal information skills, attitudes, and skills. It is slightly different from the argument of Yudiyanto (2021) that the learning outcomes or learning achievements include three domains: cognitive, affective, and psychomotor domains. However, Rosyid et al. (2019) argue that learning achievement principally is oriented toward the achievement of students in terms of knowledge. From the several definitions, student learning achievement can be seen or known through the assessment process of their activities. The assessment must be carried out using measurement evaluation media with a certain standard so that the results of the evaluation can describe in detail the achievement of students' abilities (learning achievements).

Suciati (2016) mentions several indicators of student learning achievement. The first is the quality and quantity of knowledge that has been mastered by students. The second is indicated by the satisfaction of curiosity. The third is that learning achievement is defined as information material in educational innovation. The fourth is that learning achievement becomes an internal and external indicator of an educational institution. Student learning achievement can be measured by assessing several indicators. Bloom (1994) mentions three indicators: cognitive, affective, and psychomotor indicators.

Behind the students who excel in the learning process, some factors influence them because there is a process of interaction that occurs in it. Fu'adah (2021) mentions several factors that influence learning achievement. The first is students' internal factors which consist of physiological factors (i.e., physical conditions and the five senses) and psychological factors (i.e., talents, interests, intelligence, motivation, and cognitive abilities). The second is students' external factors which consist of environmental factors (i.e., the social and natural environment) and instrumental factors (i.e., curriculum, materials, teachers, facilities, administration, and management). In this context, Saleng (2021) argues that the factors determining student learning achievement are very complex. This complexity may determine the high and low learning achievement of students.

From the explanation above, this study follows the definition of learning achievement put forward by Rosyid et al. (2019) that learning achievement is the value or result obtained by students in learning activities both individually and in groups after they complete the learning process. This is more or less the same as the understanding of learning outcomes but learning achievement is more oriented to the achievement of students in terms of knowledge. As for learning achievement indicators, this study refers to the theory put forward by Bloom (1994) that mentions the cognitive, affective, and psychomotor domains. Thus, in the context of this study, the data for the variable of learning achievement are seen from the average results of the final semester assessment (the even semester for the academic year 2021/2022).

Teacher Professional Competence

Principally, the teacher is a profession. For this reason, a teacher can be defined as a professional educator who has the main task of educating, teaching, guiding, giving advice, and others. From the tasks carried out, teachers must have competence. Mulyasa in Wardan (2019) argues that teacher competence is a quantitative description of meaningful behavior.

Pandiangan (2019) says competence is the ability to carry out those obtained through education and training in the realms of affective, cognitive, and performative domains. Meanwhile, Napitupulu (2017) says that competence is knowledge, mastery of a task, skills, attitudes, and basic values reflected in the habit of thinking, acting, and appreciating what is needed to support the quality of teachers shown in the form of mastery of knowledge in a professional manner based on the required performance standards. According to Wardan (2020), competence is a characteristic that stands out for a person and indicates ways of behaving and thinking in all situations that last continuously for a long time. From these arguments, it can be concluded that competence is the ability,

skill, performance, and knowledge of a person in a job that lasts for a long time in achieving the desired goal.

The term "professional" in Law No. 14/2005 concerning Teachers and Lecturers is a job or activity carried out by a person and becomes a source of income in life which principally requires skills that meet certain quality standards or norms and needs to be achieved through professional education (Suyanto & Jihad, 2013).

Danim (2015) divides professional competence into two sub-competence domains. The first is related to the mastery of scientific substances in the field taught. Its essential indicators are the understanding of teaching materials in the school curriculum, the understanding of structures, scientific concepts, & methods coherent with teaching materials, and the understanding of conceptual relationships between subjects taught and the application of scientific concepts in everyday life. The second is related to the mastery of structures and methods of the field taught. Its essential indicators are the mastery of research steps and critical studies to deepen knowledge or material in the field of study.

According to Nurzaman et al. (2019), professional competence is the ability that teachers must have in mastering learning materials broadly and deeply, including concepts, scientific methods, technology, and art, which are relevant to educational unit programs and subject groups. This is in line with the argument from Bastian & Yasin (2022) that professional competence has standards as set in Indonesia's Minister of National Education Regulation No. 16/2007. These competency standards can be elaborated into five core competencies (Hasriani, 2022). The first is mastering the material, structure, concept, and scientific mindset that supports the subjects being taught. The second is mastering competency standards and basic competencies of subjects or areas of development being taught. The third is developing creatively guided-learning materials. The fourth is developing professionalism sustainably by taking reflective actions. The fifth is utilizing information and communication technology for self-development.

From some of the arguments aforementioned, it can be concluded that teacher professional competence is abilities possessed by teachers to master learning materials more deeply, to develop materials more creatively, to understand, and to apply the theoretical basis of learning according to the level of development of students.

Suteja (2013) mentions several characteristics of the professional competence of teachers. First, the level of specialist education requires teachers to carry out their positions with full responsibility, be independent in making

decisions, be proficient, and be skilled in doing work. Second, teachers must have motives and goals for doing work. Third, teachers have a code of ethics that must be voluntarily accepted as a code of conduct and the actions of the professional group concerned. Fourth, the teachers must have a spirit of professional solidarity, for example in the form of cooperation between its members both in joy and sorrow.

Davis (1982) mentions several characteristics of professional competence. The first is the ability to create a conducive learning climate in the classroom. The second is the ability to develop learning strategies and management. The third is the ability to provide feedback and reinforcement to students. At last, the fourth is the ability to do self-improvement.

Danumiharja (2014) mentions several requirements that must be met by professional teachers. The first is to possess a code of ethics as a reference in carrying out its duties and functions. The second is to have a permanent client/service object, namely students. The third is to be recognized by the community because their services are needed. In addition, the National Education Association (NEA) mentions the requirements of the teaching profession. First, it involves intellectual activity. Second, it explores a specific body of knowledge. Third, it takes a long time to prepare. Fourth, it requires continuous in-service training. Fifth, it promises a life career and permanent membership. Sixth, it needs professional decisions. Seventh, it prioritizes service over personal gain. Eighth, it has a strong and tightly-knit professional organization (Sesriyani et al., 2022).

Thus, the level of professionalism of a teacher can be seen from several things, namely the ability to master the educational basis, the understanding of the field of educational psychology, the ability in mastering the material or subject matter based on the field of study taught, the ability to apply various methodologies and learning strategies, and the ability to design and utilize various media and teaching resources.

RESULTS AND DISCUSSION

Description of Data and Results of Analysis of Variables X and Y *Variable X (Teacher Professional Competence)*

Data concerning teacher professional competence were obtained from the results of a questionnaire distributed to 170 students from class XI at MAN 3 Tangerang in the academic year 2021/2022.

Table 2. The Distribution of Data of Variable X (Teacher Professional Competence)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	27-34	2	1.2	1.2	1.2
	35-42	2	1.2	1.2	2.4
	43-50	2	1.2	1.2	3.5
	51-58	10	5.9	5.9	9.4
	59-66	32	18.8	18.8	28.2
	67-74	70	41.2	41.2	69.4
	75-82	50	29.4	29.4	98.8
	83-90	2	1.2	1.2	100.0
	Total	170	100.0	100.0	

Source: Results of Data Processing Using SPSS ver. 22 (2022)

Based on the table above, it is known that the respondents who got a score of 27-34 were 2 people, those having a score of 35-42 were 2 people, those gaining a score of 43-50 were 2 people, those obtaining a score of 51-58 were 10 people, those acquiring a score of 59-66 were 32 people, those receiving a score of 67-74 were 70 people, those gaining a score of 75-82 were 50 people, and those achieving a score of 83-90 were 2 people.

Mean, Median, and Mode

Table 3. Mean, Median, and Mode of Variable X

Statistics

Teacher Professional Competence

N	Valid	170
	Missing	0
Mean		69.5588
Std. Error of Mean		.71555
Median		70.0000
Mode		69.00
Std. Deviation		9.32957
Variance		87.041
Range		57
Minimum		27
Maximum		84
Sum		11825

Source: Results of Data Processing Using SPSS ver. 22 (2022)

Based on the table above, the average value (mean) of the variable X (teacher professional competence) is 69.55, the median is 70.00, the mode is 69.00, and the standard deviation is 9.329. Furthermore, to determine the level of tendency or the level of scores obtained from variable X (teacher professional competence), the researchers used the average value (mean) and standard deviation. The following table shows the level of the tendency of variable X.

Table 4. The Level of Data Tendency of the Variable X

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	20	11.8	11.8	11.8
	Medium	126	74.1	74.1	85.9
	High	24	14.1	14.1	100.0
	Total	170	100.0	100.0	

Source: Results of Data Processing Using SPSS ver. 22 (2022)

Based on the table above, those having the score for the variable X (teacher professional competence) included in the low category are 20 students (11.8%), those in the medium category are 126 students (74.1%), and those in the high category are 24 students (14.1%). From the scores obtained, we can conclude that the professional competence of teachers is in the medium category.

Variable Y (Student Learning Achievement)

Data regarding student learning achievement were obtained from the average value of 170 students of class XI at MAN 3 Tangerang in the Even Semester Final Assessment in the academic year 2021/2022.

Tabel 5. The Distribution of Data of Variable Y (Student Learning Achievement)

		Frequency	Percent	Valid Percent	Cumulative Percent
	80-81	2	1.2	1.2	1.2
	82-83	37	21.8	21.8	22.9
	84-85	55	32.4	32.4	55.3
Valid	86-87	55	32.4	32.4	87.6
	88-89	19	11.2	11.2	98.8
	90-91	2	1.2	1.2	100.0
	Total	170	100.0	100.0	

Source: Results of Data Processing Using SPSS ver. 22 (2022)

Based on the table above, it can be seen that 2 respondents got a score of 80-81, 37 people gained a score of 82-83, 55 people had a score of 84-85, 55 people attained a score of 86-87, 19 people obtained a score of 88-89, and 2 people achieved a score of 90-91.

Mean, Median, Mode, and Standard Deviation

Data regarding student learning achievement were obtained from the average value of 170 students of class XI at MAN 3 Tangerang in the Even Semester Final Assessment in the academic year 2021/2022.

Table 6. Mean, Median, and Mode of Variable Y

Statistics

Student Learning Achievement

N	Valid	170
	Missing	0
Mean		85.1176
Std. Error of Mean		.15583
Median		85.0000
Mode		84.00
Std. Deviation		2.03177
Variance		4.128
Range		10
Minimum		81
Maximum		91
Sum		14470

Source: Results of Data Processing Using SPSS ver. 22 (2022)

Based on the table above, it can be seen that the average value (mean) of the variable Y (student learning achievement) is 85.11, the median is 85.00, the mode is 84.00, and the standard deviation is 2.031. Furthermore, to determine the level of tendency or the level of scores obtained from the variable Y (student learning achievement), the researchers used the average value (mean) and standard deviation. The following table shows the level of the tendency of variable Y.

Table 7. The Level of Data Tendency of the Variable Y

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	39	22.9	22.9	22.9
	Medium	110	64.7	64.7	87.6
	High	21	12.4	12.4	100.0
	Total	170	100.0	100.0	

Source: Results of Data Processing Using SPSS ver. 22 (2022)

Based on the table above, those having the score for the variable Y (student learning achievement) included in the low category are 39 students (22.9%), those in the medium category are 110 students (64.7%), and those in the high category are 21 students (12.4%). From the scores obtained, we can conclude that the learning achievement of students at MAN 3 Tangerang is in the medium category.

Prerequisite Tests for Analysis

Normality Test

A normality test was used to determine whether the data were normally distributed or not. Regression is considered to be good when it has data that are normally distributed. The normality test method used in this study was the Kolmogorov-Smirnov test, as follows.

Table 8. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Teacher Professional Competence	.067	170	.057	.980	170	.015
Student Learning Achievement	.062	170	.200*	.986	170	.084

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: Results of Data Processing Using SPSS ver. 22 (2022)

Based on the results of the normality test, it can be concluded that the data on variable X (teacher professional competence) have a fairly good Kolmogorov-Smirnov significance value, which is 0.057. Meanwhile, the data on the variable Y (student learning achievement) have also a good Kolmogorov-Smirnov significance value, which is 0.200. Therefore, it can be concluded that the data on variables X and Y are normally distributed because they have a Kolmogorov-Smirnov significance value of > 0.05.

Linearity Test

The linearity test was conducted to determine whether the two variables had a significant linear relationship or not. Concerning the linearity test in this study, the researchers set the significance level (sig) at 0.05. The following are the results of the linearity test.

Table 9. Results of the Linearity Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Student Learning Achievement* Teacher Professional Competence	Between Groups	(Combined)	258.547	32	8.080	2.521	.000
		Linearity	146.466	1	146.466	45.698	.000
		Deviation from Linearity	112.081	31	3.616	1.128	.312
	Within Groups		439.100	137	3.205		
	Total		697.647	169			

Source: Results of Data Processing Using SPSS ver. 22 (2022)

From the results of the linearity test, it is known that the significance value of "Deviation from Linearity" is 0.312, meaning that there is a linear relationship between the variable X (teacher professional competence) and variable Y (student learning achievement) because the score of "Deviation from Linearity" (0.312) is > significance level (0.05). Therefore, the assumption of linearity is met.

Results of Hypothesis Testing

Simple Linear Regression Analysis

Simple linear regression analysis was used to see linearly to what extent the influence of the independent variable (X) on the dependent variable (Y). The following is a presentation of data from a simple regression analysis of variable X (teacher professional competence) and variable Y (student learning achievement).

Table 10. Results of Simple Linear Regression Test

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	78.177	1.048		74.591	.000
Teacher Professional Competence	.100	.015	.458	6.682	.000

a. Dependent Variable: Student Learning Achievement

Source: Results of Data Processing Using SPSS ver. 22 (2022)

From the coefficient table above, the value in column B in constant (a) is 78.177, while the value for teacher professional competence is .100. Therefore, the regression equation can be written as follows.

$Y' = a + bX$

$Y' = 78.177 + 0.100\ X$

The value of 78.177 above is a constant number, which means that if there is no teacher professional competence (X = 0), then the consistent value of student learning achievement (Y) is 78.177. Meanwhile, the value of 0.100 means that, for every 1 additional level of teacher professional competence (X), the learning achievement of students (Y) will increase by 0.100.

The regression equation above can be interpreted that if the professional competence of teachers increases by 1 unit, then the learning achievement of students will increase by 0.100. In addition, the intercept value of 78.177 indicates that the Y-axis intersects when X is equal to zero. In other words, if teacher professional competence is 0, then student learning achievement is estimated at 78.177.

ANOVA

The ANOVA is one of the methods or hypothesis testing used in parametric statistics, in which the test is carried out on the interaction of two factors by comparing the average of two or more samples. The following is the presentation of the data from the ANOVA.

Table 11.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	146.466	1	146.466	44.643	.000[b]
	Residual	551.181	168	3.281		
	Total	697.647	169			

a. Dependent Variable: Student Learning Achievement

b. Predictors: (Constant), Teacher Professional Competence

Source: Results of Data Processing Using SPSS ver. 22 (2022)

The table above shows the results of testing the overall hypothesis about the simultaneous independent variables (teacher professional competence) which have a significant influence on the dependent variable (student learning achievement). These results are indicated by the value of significance of 0.000 (< 0.05), meaning that Ho is rejected and Ha is accepted. For this reason, it can be concluded that teacher professional competence affects student learning achievement on the *F* statistical significance test.

Partial Test (t-test)

A partial test or t-test is used to determine the effect of the independent variable on the dependent variable. The results of the partial test (t-test) can be seen in Table 10 covering the results of the simple linear regression test.

Coefficient of Determination

The coefficient of determination is one of the tests to determine the effect of variable Y (teacher professional competence) on variable X (student learning achievement) in the linear regression test. This test results in the *R*-value as shown in the following table.

Table 12. The Results of the Coefficient of Determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.458[a]	.210	.205	1.81131	.210	44.643	1	168	.000

a. Predictors: (Constant), Teacher Professional Competence
b. Dependent Variable: Student Learning Achievement
Source: Results of Data Processing Using SPSS ver. 22 (2022)

From the table above, it is known that the coefficient of determination (adjusted *R* square) is 0.205 (20%). This value is the amount of the ability of the variable "teacher professional competence" to explain the variable "student learning achievement", which is 20%. Meanwhile, the remaining 80% comes from other variables that are not examined in this study. Thus, it can be concluded that the professional competence of teachers can explain student learning achievement by 20%. This shows that the regression test is suitable to be used to analyze the ups and downs of the variable "student learning achievement".

Based on the results of processing and calculating data obtained in the field, this study proves that teacher professional competence influences 20% of student learning achievement. The results of teacher professional competence are in the medium category, which can be seen from the results of the trend level of the variable of teacher professional competence that is in the medium category, in which 126 (74.1%) of the total sample (170) are included in that category. Likewise, the results for the variable "student learning achievement" indicated the medium category, which can be seen from the results of the trend level of the variable of student learning achievement that is in the medium category, in which 110 (64.7%) of the total sample (170) are included in that category.

Concerning the hypothesis testing to answer the research problems related to the effect of teacher professional competence on student learning achievement, the researchers carried out a partial test (t-test). The results of this test indicated that Ha is accepted and Ho is rejected. In other words, teacher professional competence influences student learning achievement. It can be seen from the t-test which results in t-count (6.682) which is > t-table (1.974), signifying that the variable "teacher professional competence" affects the variable "student learning achievement". In addition, the obtained significance value of teacher professional competence is 0.000 (< 0.05).

The results of testing the overall hypothesis about the simultaneous independent variable (teacher professional competence) on the dependent variable (student learning achievement) can be seen in the ANOVA table which indicates a significance value of 0.000 (< 0.05), meaning that teacher professional competence has a significant influence on student learning achievement on the *F* statistical significance test.

Furthermore, to predict the value of variable Y (student learning achievement) if variable X (teacher professional competence) increases or decreases, the researchers carried out a linear regression test. The results of the calculation of the simple linear regression test generated the regression equation of Y' = 78.177 + 0.100 X. Through this regression equation, it can be seen that, for every additional 1 level of teacher professional competence (X), the student learning achievement (Y) will increase by 0.100. However, if there is no teacher professional competence (X = 0), then the value of student learning achievement (Y) is 78.177.

In addition, the coefficient of determination showed a value (adjusted *R* square) of 20%. It presents the magnitude of the contribution given by the variable of teacher professional competence in explaining the variable of student learning achievement. Meanwhile, the remaining 80% comes from other variables that are not studied. Thus, it can be concluded that the null hypothesis (Ho) is rejected and the alternative hypothesis (Ha) is accepted. In other words, the professional competence of teachers has a significant influence on the learning achievement of students.

CONCLUSION

As seen in the section on the results and discussion, the professional competence of teachers has a significant influence on the learning achievement of students at MAN 3 Tangerang. The effect generated by the professional competence of teachers is evidenced by the t-count (i.e., 6.682) which is greater than the t-table (1.974). In addition, the significance value is 0.000 which is less

than 0.05. Moreover, the contribution of teacher professional competence in explaining student learning achievement is 20%. Meanwhile, the remaining 80% is explained by other variables that are not examined in this study. The results of this study also show that teacher professional competence is still classified in the medium category, while student learning achievement is also in the medium category. Thus, student learning achievement can be improved further by strengthening teachers' professional competence. In line with this, students will experience an increase in learning achievement if teachers improve their professional competence.

REFERENCES

Aas, H. K. (2022). Teachers talk on student needs: exploring how teacher beliefs challenge inclusive education in a Norwegian context. *International Journal of Inclusive Education*, *26*(5), 495–509. https://doi.org/10.1080/13603116.2019.1698065

Al Issa, H.-E., Saad, S., & Dittavichai, R. (2022). The impact of perceived value on engagement: the role of teacher behavior. *International Journal of Educational Management*, *ahead-of-p*(ahead-of-print). https://doi.org/10.1108/IJEM-03-2022-0102

Arifa, S. N. (2022, January 24). *Hari Pendidikan Internasional, Bagaimana Tingkat Pendidikan di Indonesia Saat ini?* https://www.goodnewsfromindonesia.id/2022/01/24/hari-pendidikan-internasional-bagaimana-tingkat-pendidikan-di-indonesia-saat-ini

Bastian, A., & Yasin. (2022). *Menjadi Guru Profesional Dalam Konteks Globalisasi*. Media Sains Indonesia.

Bloom, B. S. (1994). Reflections on the development and use of the taxonomy. In L. Anderson & L. Sosnaik (Eds.), *Bloom's taxonomy: A forty-year retrospective*. University of Chicago Press.

Bono, G., Dufy, T., & Moreno, S. (2022). Benefits to students and schools. In K.-A. Allen, M. J. Furlong, D. Vella-Brodrick, & S. M. Suldo (Eds.), *Handbook of Positive Psychology in Schools: Supporting Process and Practice* (3rd ed., p. 118). Routledge.

Danim, S. (2015). *Pengembangan Profesi Guru: Dari Pra jabatan, Induksi, ke Profesional Madani*. Kencana.

Danumiharja, M. (2014). *Profesi tenaga kependidikan*. Deepublish.

Darman, R. A. (2020). *Belajar dan Pembelajaran*. Guepedia.

Davis, G. A. (1982). A model for teaching for creative development. *Roeper Review*, *5*(2), 27–29. https://doi.org/10.1080/02783198209552674

Fu'adah, A. (2021). *Pembelajaran Metode Tutor Sebaya: Untuk Meningkatkan Prestasi Dan Motivasi Belajar Anak*. Pusat Pengembangan Pendidikan dan Penelitian Indonesia.

Hasriani, G. (2022). English Teachers' Pedagogical Competence in Regard to Understanding the Students. *Language Circle: Journal of Language and Literature*, *16*(2), 321–331. https://doi.org/10.15294/LC.V16I2.34258

Idris, M., Bin Tahir, S. Z., Willya, E., Yusriadi, Y., & Sarabani, L. (2022). Availability and Accessibility of Islamic Religious Education Elementary School Students in Non-Muslim Base Areas, North Minahasa, Indonesia. *Education Research International*, *2022*, 1–11. https://doi.org/10.1155/2022/6014952

Idris, M., & Mokodenseho, S. (2021). Model Pendidikan Islam Progresif. *J-PAI: Jurnal Pendidikan Agama Islam*, *7*(2), 72–86. https://doi.org/10.18860/JPAI.V7I2.11682

Idris, M., Tahir, S. Z. bin, Yusuf, N., Willya, E., Mokodenseho, S., & Yusriadi, Y. (2021). The Implementation of Religious Moderation Values in Islamic Education and Character Subject at State Senior High School 9 Manado. *Academy of Strategic Management Journal*, *20*(6), 1–16.

Idris, M., Wekke, I. S., Willya, E., & Mokodenseho, S. (2020). Peace resolution in education and application on information and communication technology. *International Journal of Advanced Science and Technology*, *29*(6), 3349–3358.

Julianti, U. F. (2022). *Prestasi Belajar Mahasiswa: Kaitannya dengan Kualitas Pengajaran Dosen*. Penerbit NEM.

Kemethofer, D., Helm, C., & Warwas, J. (2022). Does educational leadership enhance instructional quality and student achievement? The case of Austrian primary school leaders. *International Journal of Leadership in Education*, 1–25. https://doi.org/10.1080/13603124.2021.2021294

Leithwood, K., & Jantzi, D. (2007). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, *17*(2), 201–227. https://doi.org/10.1080/09243450600565829

Maulida, C. (2022). *Model Pembelajaran Inovatif: Alternatif Model Pembelajaran Masa Pandemi*. Penerbit Lakeisha.

Mirowsky, J., & Ross, C. E. (2017). Education, social status, and health. In *Education, Social Status, and Health*. Routledge. https://doi.org/10.4324/9781351328081

Mokodenseho, S., & Wekke, I. S. (2017). Toleransi Beragama dan Pembelajaran Agama Islam. *Prosiding Seminar Nasional & Temu Ilmiah Jaringan Peneliti*, 67–75.

Mueller, L. (2022). Education, Philosophy, and Morality: Virtue Philosophy in Kant. In P. Bursztyka, E. Kramer, M. Rychter, & R. Auxier (Eds.), *Philosophy of Culture as Theory, Method, and Way of Life* (pp. 242–274). Brill. https://doi.org/10.1163/9789004515796_014

Napitupulu, D. S. (2017). *Kompetensi Kepribadian Guru: Upaya Meningkatkan Ranah Afektif Siswa*. CV. Eskol Media Kreasi.

Nurzaman, E. (2021). *Pendidikan dan Profesi Keguruan Dalam Membangun Sumber Daya Manusia (SDM)*. Samudra Biru.

Nurzaman, E., Alinurdin, H., & Balianto, P. (2019). *Profesi Keguruan* (A. Muhidin (ed.)). UNPAM Press.

Pandiangan, A. P. B. (2019). *Penelitian Tindakan Kelas: Sebagai Upaya Peningkatan Kualitas Pembelajaran, Profesionalisme Guru, dan Kompetensi Belajar Siswa*. Deepublish.

Pradewo, B., & Setiawan, H. (2021, November 19). *Kemendikbudristek Ungkap Rata-Rata Skor Kompetensi Guru 50,64 Poin*. Jawapos.Com. https://www.jawapos.com/nasional/pendidikan/19/11/2021/kemendikbudristek-ungkap-rata-rata-skor-kompetensi-guru-5064-poin/

Restian, A. (2020). *Psikologi Pendidikan: Teori Dan Aplikasi*. UMM Press.

Rosyid, M. Z., Mustajab, & Abdullah, A. R. (2019). *Prestasi Belajar* (H. Sa'diyah (ed.)). Literasi Nusantara.

Sahin, D., & Yilmaz, R. M. (2020). The effect of Augmented Reality Technology on middle school students' achievements and attitudes towards science education. *Computers & Education*, *144*, 103710. https://doi.org/10.1016/J.COMPEDU.2019.103710

Saleng, Z. A. (2021). *Kecerdasan Emosional, Profesionalisme Guru Dan Prestasi Belajar Siswa*. MNC Publishing.

Sesriyani, L., Anwar, S., & Harlinda. (2022). *Guru Sebagai Sebuah Profesi: Cintai Profesinya, Senangi Pengalamannya, Nikmati Kebahagiannya*. Pascal Books.

Suciati, W. (2016). *Kiat Sukses Melalui Kecerdasan Emosional dan Kemandirian Belajar*. Rasi Terbit.

Suteja, J. (2013). *Etika Profesi Keguruan*. Deepublish.

Suyanto, & Jihad, A. (2013). *Menjadi Guru Profesional: Strategi Meningkatkan Kualifikasi dan Kualitas Guru di Era Global*. Erlangga.

Varagur, K. (2019, December 17). *Prestasi Pelajar Indonesia Terendah di Asia Tenggara*. VOA INDONESIA. https://www.voaindonesia.com/a/prestasi-pelajar-indonesia-terendah-di-asia-tenggara/5208793.html

Wardan, K. (2019). *Guru Sebagai Profesi*. Deepublish.

Wardan, K. (2020). *Motivasi Kerja Guru Dalam Pembelajaran*. Media Sains Indonesia.

Wekke, I. S., & Mokodenseho, S. (2017). Religious Teaching and Learning in Minority Muslim of Manado Indonesia. *Proceedings of the 2nd International Conference on Education, Science, and Technology (ICEST 2017)*, 187–189. https://doi.org/10.2991/ICEST-17.2017.62

Wekke, I. S., Mokodenseho, S., & Firdaus, F. (2017). Religious Education and Tolerance: Learning Process in High School of Minority Muslim Indonesia. *INA-Rxiv Papers*. https://doi.org/10.31227/osf.io/km79d

Wekke, I. S., Mokodenseho, S., & Rahman, A. F. (2018). Values of Religious Tolerance in Islamic Learning Material of Muslim Minority State High School. *INA-Rxiv Papers*. https://doi.org/10.31227/osf.io/tfbkc

Yudiyanto, M. (2021). *Revitalisasi Peran Ekstrakurikuler Keagamaan Di Sekolah*. Farha Pustaka.

Zilka, A., Grinshtain, Y., & Bogler, R. (2022). Fixed or growth: teacher perceptions of factors that shape mindset. *Professional Development in Education*, *48*(1), 149–165. https://doi.org/10.1080/19415257.2019.1689524