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Modeling of Educational Technology Competency, Transformational Leadership and Self-Efficacy Towards Teachers' Professional Commitment in Multicultural Education

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Abstract: This study aims to determine the effect of educational technology competence, transformational leadership and self-efficacy on teachers' professional commitment to multicultural education in public elementary schools in Grogol Petamburan District, West Jakarta. This study uses a survey method with a quantitative approach using path analysis techniques. The data for this study were obtained by questionnaire. The survey involved 173 certified teachers from 25 public elementary schools as samples using simple random sampling techniques. The results of the study showed: 1) There is a positive direct effect of educational technology competence on teachers' professional commitment to multicultural education with a path coefficient value of 0.278 and a calculated t coefficient value of 4.311, 2) There is a positive direct effect of transformational leadership on teachers' professional commitment to multicultural education with a path coefficient value of 0.306 and a calculated t coefficient value of 4.76, 3) There is a positive direct effect of self-efficacy on teachers' professional commitment to multicultural education with a path coefficient value of 0.286 and a calculated t coefficient value of 4.477. Therefore, the three calculated t coefficient values are greater than the t table value, so H₀ is rejected and H_a is accepted, namely that educational technology competence has a direct positive effect on teachers' professional commitment to multicultural education, transformational leadership has a direct positive effect on teachers' professional commitment to multicultural education, and self-efficacy has a direct positive effect on teachers' professional commitment to multicultural education.

Keyword: Educational Technology Competency, Transformational Leadership, Self-Efficacy, Professional Commitment, Multicultural Education.

INTRODUCTION

Education is a fundamental and strategic factor in human resource development. In the journey of a nation, education contributes to the progress of the nation. Furthermore, education is also an important factor in measuring the success of a region's development. This has a strategic value on the characteristics of human resources with diverse student backgrounds (Jantzen, Carl August, 2020). This is certainly a problem and challenge for teachers in realizing

education, especially development in areas with heterogeneous population characteristics (Miftakhu Rosyad, A, 2020). One of the characteristics of quality education is being able to facilitate various student backgrounds in the form of religion, race, ethnicity, culture, understanding, and various other beliefs in one educational unit in accordance with the vision and mission of the state.

The educational process, especially the current educational process, has shifted to the dominant role of the results of the adoption and innovation of digital communication studies or media communication with the use of digital technology. Educational technology is the development, application and assessment of systems, techniques and tools to improve and enhance the teaching and learning process.

Technology in education includes all tools that can be used to present information, especially those related to education and assessment, such as television, language laboratories, computers and various media, thus influencing the professional commitment of teachers. Hamalik (2000) technology in education is all that is included as audio-visual aids.

Good education is expected to improve the quality of human resources (HR). The United Nations Educational, Scientific, and Cultural Organization (UNESCO) (2014) stated that education is also an actor driving sustainable development. The obstacle so far has been that learning facilities seem uniform, in line with curriculum demands, but cannot translate applications at the regional level.

As a reform movement and a process to create an equal educational environment for all students, multicultural education has the following principles. First, multicultural education is a political movement that aims to ensure social justice for all citizens regardless of their background. Second, multicultural education contains two dimensions: learning (classroom) and institutions (schools) and the two cannot be separated, but must be handled through comprehensive reform. The third, multicultural education emphasizes comprehensive educational reform that can be achieved only through a critical analysis of the comprehensive reform system in education. Fourth, based on this critical analysis, the goal of multicultural education is to provide every student with a guarantee of getting the opportunity to achieve maximum achievement according to their abilities. Fifth, multicultural education is a good education for all students, regardless of their background.

To improve the professional commitment of teachers, effective multicultural education is needed in realizing education for all in a country (Anwar, K, 2021). For example, the city of Jakarta with a population of nearly 15 million people is undeniably the most diverse and heterogeneous city. Therefore, the role of teachers in the city of Jakarta can develop as professional teachers and be committed to multicultural education.

Several research results since the implementation of the curriculum show that the integrity of multicultural education in national education has not been fully implemented (Farinde-Wu, A., Glover, C. P., & Williams, N. N. (2017). This is still a lot of violence in education, student bullying, student harassment, and ethics in the learning process caused by the background factor of the diversity of students. The role of teachers seems to be outside the commitment as professional teachers that have occurred in schools (Rohmah, H., Rena, S., Pahrurraji, P., & Syarif, F., 2023).

Teachers play an important role in developing attitudes and behaviors towards change mechanisms. Teachers as the main resource in improving the quality of education have a very important role in teaching diversity to children (Mappaenre, Andi., 2023). Therefore, a teacher needs to develop strong professional competencies about culture and diversity. In providing multicultural teaching to students, teachers must have a greater understanding of diversity. Teachers and students can live happily and productively in a multicultural country if they already have a broad understanding of the diverse backgrounds of students Ceren S. Abacioglu, Agneta H. Fischer, Monique Volman (2022).

Research conducted by Akhmad Hidayatullah Al Arifin (2012) in the Journal of Educational Development: Foundations and Applications entitled "Implementation of Multicultural Education in Educational Practice in Indonesia" concluded that there is a positive relationship between professional commitment and multicultural education. Research related to the influence of leadership on professional commitment which is a reference variable that is still relevant and interesting to study. Research by Handriadi and Nurasih Ahmad (2020) in the Journal of Islamic Studies: The Influence of Madrasah Principal Leadership, Self-Efficacy, and Professional Commitment on Work Motivation and Teacher Performance at MTsN Kota Pariaman" can be concluded that there is a positive relationship between leadership, self-efficacy and teacher professional commitment.

Based on above the research background above, the research objectives analyze:

1. Is there direct influence of educational technology competence on teachers' professional commitment in multicultural education?
2. Is there direct influence of transformational leadership on teachers' professional commitment in multicultural education?
3. Is there direct influence of self-efficacy on teachers' professional commitment in multicultural education?
4. Is there direct influence of educational technology competence on self-efficacy?
5. Is there direct influence of transformational leadership on self-efficacy?
6. Is there indirect influence of educational technology competence on teachers' professional commitment in multicultural education through self-efficacy?
7. Is there indirect influence of transformational leadership on teachers' professional commitment in multicultural education through self-efficacy?

The value of novelty that differentiates this research from previous research lies in the direct influence of educational technology competence, transformational leadership, and self-efficacy on the professional commitment of teachers in multicultural education at State Elementary Schools in Grogol Petamburan District, West Jakarta.

Multicultural education is an idea of human resource development that is based on equality for all students in the form of nationality. Indonesia, which consists of various races, tribes, cultures, ethnicities, religions, and beliefs in the implementation of multicultural education, is the basic capital for the success of national education policies. The multilevel structural equation model shows that teachers who receive professional development have more positive attitudes and beliefs about multicultural ideology and practices compared to teachers who do not undergo professional development.

In this study, multicultural education modeling can be developed by the professional commitment of teachers supported by the type and style of principal leadership, as well as teacher self-efficacy in their dedication. In relation to the concept of education for sustainable development (EfSD), multicultural education is one of the main goals in the ideals of achievement.

The relevance of professional commitment in its application to the needs of multicultural education, experts and specialists who study this field are very focused on factors that can be effective. Multicultural education still has various meanings, Kamanto, Sunarto explains that multicultural education is usually interpreted as education that discusses the diversity of entities in society, especially culture, besides that it can be understood as modeling the diversity of many symbolic entities that exist in society, and is also known as a dogmatic discipline that functions to build students' understanding of diversity (Sunarto, 2004).

Besides that, Sada, through the writings of Sleeter and Grant, revealed that multicultural education has four types, such as (1) learning about cultural diversity, a cultural assimilation approach, (2) learning about various approaches to social relations, (3) learning to prioritize

pluralism without differentiating social status in society, and (4) learning about diversity to increase pluralism and equality (Sada, 2004).

According to Banks (2001) in Hanum, multicultural education is a set of beliefs and reinforcement of the importance of culture in everyday life, the experience of social reality, cultural identity that is private, accessibility of individual, group and state education. Howard (1993) in Hanum's explains that multicultural education contains indicators of multicultural character, namely learning equality, learning assistance methods, diversity of teaching materials, and the existence of an adaptive curriculum.

In the early life phase of students, social life is still limited to values, culture in the natural place of origin. Mistakes during the process of transformation of values, ethics, and manners have an impact on the emergence of racial, religious, and class primordialism that tends to be extreme. This condition is what causes vulnerability to conflict.

The multicultural education scheme is one of the hopes that is sought so that children are able to accept differences in perspective, culture, habits and backgrounds between individuals in society. Broadly speaking, it can be seen that multicultural-based education tries to unite different elements nationally in one democratic knot through plurality value approaches in viewing diversity itself. Meanwhile, the idea of multiculturalism in Indonesia came from H.A.R Tilaar who said that multicultural education is to increase a sense of pride in the ethnic and cultural diversity of society (Tilaar, 2004).

Based on the description above, it can be synthesized that professional commitment in multicultural education is a person's psychological attachment to their profession in the affective, continuous, and normative dimensions towards the values of the teaching profession in realizing learning equality, learning assistance methods, diversity of teaching materials, and adaptive curriculum.

Relevancy with Educational technology competence is the ability to master new concepts about learning; design and implement learning patterns; design, produce and use various media to improve the effectiveness and efficiency of learning and the drive or desire within teachers that will shape behavior to excel in carrying out activities or tasks as well as possible in order to achieve teacher achievement that teacher professional commitment increases.

Referring to the definition formulated by the oldest professional organization of Educational Technology, namely the Association for Educational Communication and Technology (AECT, 2004), the qualifications possessed by the educational technology above are competencies that refer to the ability to develop media and/or learning resources, from conventional ones to the use of information and communication technology (ICT) for an educational institution independently. This concentration fosters competencies that refer to the needs of the organization to improve the quality of human resource (HR) performance through various learning and teaching/training efforts and the application of ICT (organization-oriented). The competencies in question include developing training models and curricula, learning/training interventions, use of media for training, training needs analysis, and evaluation and assessment for training.

Based on the description above, it can be synthesized that educational technology competence is the ability to analyze, synthesize, and work in developing media and/or learning resources that are conventional to the use of information and communication technology (ICT) for a learning process. Leadership and organizational functions, Nongard (2014) explains that transformational leadership is the ability of leaders to process in creating change, motivation, synergy, and sustainable functions in organizational and individual units. This is further emphasized by Luthan (2011), that the definition of transformational leadership is the ability of leaders to shift values, beliefs, and needs of their followers.

Therefore, in the context of organizational unity with its followers according to Griffin and Moorhead (2014), transformational leadership is the ability of leaders to recognize the need for change, create a vision, guide change, and implement change effectively. Even in the

process of organizational dynamics, according to Rowe and Guerrero (2012), transformational leadership is the ability of leaders to involve the process of leader interaction with their followers by respecting emotions, values, ethics, standards, long-term goals, and including the assessment of follower motivation, satisfying their needs in carrying out transformation.

Factors that influence transformational leadership at the level of a leader's role, Aamodt (2013) explains, transformational leaders always provide confidence, have a need to influence others, and have a strong attitude that their beliefs and ideas are right. While Bateman and Snell (2015), that the factor of a person in transformational leadership, as a leader motivates people to show their best personal interests for the group. This is according to Ivancevich et. al (2014) that transformational leaders are able to influence others by using charisma, paying attention to followers, and stimulating others. But how can transformational leadership affect innovation (Pieterse, A, et al.,) and illustrates that the effects of each dimension of transformational leadership may have different influences on organizational innovation (Engelen et al). Bass as quoted by Champoux (2011) that transformational leadership has strengths in charisma factors, individual consideration, and intellectual stimulation.

Ronquillo (2011), transformational leadership means involving the motivation of employees and members to carry out normal expectations in order to fulfill the organization's mission and achieve organizational goals, so that it can provide inspiration for staff and members to put aside personal interests for the common good of the organization and have self-confidence in their ability to achieve extraordinary challenges compared to before.

Based on the above theoretical matters, transformational leadership is the behavior of leaders to bring about change through empowerment, inspiration, and stimulation to their followers to be able to achieve organizational goals.

In addition to the above factors, the determining factor in achieving professional commitment is actually the individual's capacity for self-control known as self-efficacy. The term self-efficacy was first articulated by Alberth Bandura in 1997, which was stated in his book entitled "Self-efficacy The Exercise of Control" according to him, self-efficacy beliefs are the reason for a person's feelings, motivations, and appropriate behaviors. This can be characterized as an individual's belief that they can produce a certain caliber of performance that will have an impact on life events (Bandura & Wessels, 1994). A person's choice of activities, their level of effort, and their persistence in the face of difficulties are all influenced by the self-efficacy they feel, the higher the self-efficacy a person feels, the more persistent their participation in the activity and its final achievement (Schunk, 1981).

Perceived self-efficacy not only has a direct influence on activity choice and organization, but also through expectations of eventual success, it can influence coping efforts once they are initiated so that the stronger the perceived self-efficacy, the more active the effort (Bandura, 1977). In schools, self-efficacy beliefs are opinions held by students about their own abilities in relation to their dominant behavior in a particular area (Rao, 2003).

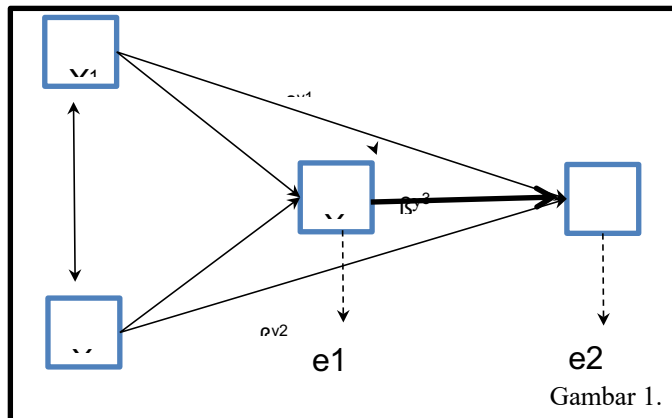
Self-efficacy is an important component in knowing whether someone is involved in a particular action because people usually do not do things that they think are beyond their control, but rather do things that they think are within their power (Pinkerton, D & Cecil, 2000).

Based on the description above, it can be synthesized that self-efficacy is the level of individual confidence in their ability to complete a task that has been given in various conditions based on targets that have been set in various conditions. The indicators of self-efficacy are (a) confidence in choosing tasks, (b) persistence in carrying out tasks, (c) confidence in various fields and.

METHOD

In this study, the researcher used a survey method with a causal technique. To analyze the data using the Path Analysis. The variables studied consist of exogenous variables

(independent/free) and endogenous variables (dependent/bound). The following is the constellation of research problems (Figure 1).



Model Pengaruh Variabel Eksogen (X1,X2, X3,) terhadap Variabel Endogen (Y)

The target population in this study were civil servant elementary school teachers who had been certified teachers in the Jakarta area. The sampling technique was carried out in stages because of the wide scope of the population. The sampling stages consisted of Cluster sampling to determine the administrative area in DKI Jakarta (West, East, North, Central, South). The sampling results determined the Administrative City of West Jakarta. The second stage was Cluster sampling in determining one sub-district in the administrative area, and Grogol Petamburan Sub-district was selected. In the selected cluster, the sub-district used the proportional random sampling technique, guided by the Slovin sampling technique formula.

The population in Grogol Petamburan Sub-district, based on data from the education office, that the number of civil servant teachers in SDN who had been certified was 272 teachers from 25 elementary schools. After going through the Slovin formula calculation above, the number of samples was 173 teachers.

In the data collection technique, research instruments are used for each variable. The variable of Teacher Professional Commitment in Multicultural Education (Y) uses a non-Test instrument consisting of 40 statement items. The Educational Technology Competence variable (X₁) uses a Test instrument with 40 True-False statement items. The Transformational Leadership variable (X₂) uses a non-Test instrument with 40 statement items. The Self-Efficacy variable (X₃) uses a Non-Test instrument consisting of 40 statement items. From the results of the instrument calibration above, it can be explained in table 1 below.

Tabel 1. Rekapitulasi kalibrasi instrumen

No.	Jenis	Butir	Valid Butir	Drop Butir	Validitas	Reliabilitas
X ₁	Tes	40	39	1 (13)	pbr r kritis= 3,681	KR-20 0,727
X ₂	Non-Tes	40	34	6 (1,10,20,29,3 0,40)	ppm r kritis= 3,681	α cronbach 0,985
X ₃	Non-Tes	40	34	6 (10,14,26, 27,38,39)	ppm r kritis= 3,681	α cronbach 0,972
Y	Non-Tes	40	35	5 (9,15,20, 26,35)	ppm r kritis= 3,681	α cronbach 0,873

Data analysis techniques consist of the stages of prerequisite tests for Normality, Homogeneity, and Linearity analysis. Presentation of data descriptions using the Sturges formula to create frequency distributions and histograms. Furthermore, the hypothesis testing stage uses Path Analysis through sub-structural model analysis 1 and 2 including individual tests and overall tests. Model suitability testing is determined by the magnitude of the path coefficient for each equation.

RESULTS AND DISCUSSION

The results of filling out the instruments on 173 certified teacher respondents who were used as samples. The data consisted of measuring four variables, such as the teacher’s professional commitment (Y), Educational technology competence (X1), Transformational leadership (X2) and self-efficacy (X3).

1. Teachers' Professional Commitment in Multicultural Education (Y)

Based on the results of the empirical descriptive analysis data of the teacher professional commitment variable (Y), it shows that the sample consisted of 173 respondents with a score range between 112 and 175, with the average was 142.20, median was 141 and mode was 148 (Fig. 2).

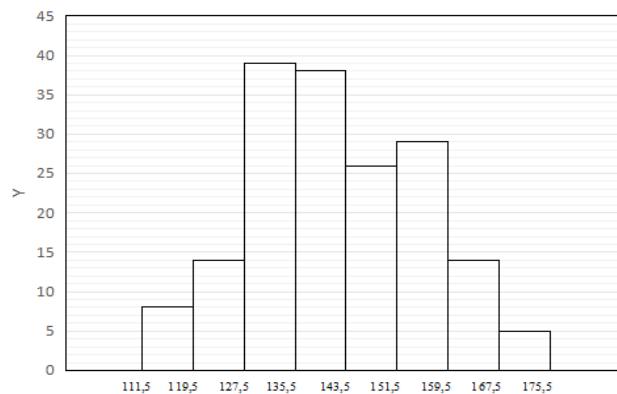
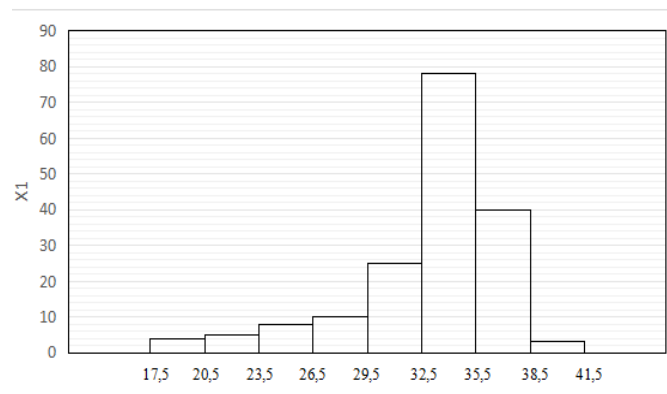


Figure 2.

Histogram of teacher’s professional commitment in multicultural education (Y)

2. Educational Technology Competency (X1)

The data ranges of these variabel consists of score average 33,11 Median 35 and Mode 35. Histogram of data it can be explained in figure below (Fig. 2).



Gambar 3.

Histogram of educational technology competency (X1)

3. Transformasional Leadership (X2)

The data ranges of transformasional leadership have score average 142,17 Median 149 and Mode was 170. The data it can be describe in figure below (Fig. 4).

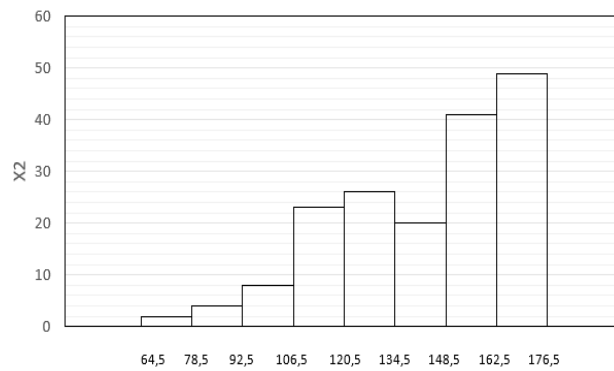


Figure 4.
Histogram of transformational leadership (X₂)

4. Self Efficacy (X₃)

The data ranges have score average was 143,41, median was 155 and Mode was 162. Visually of data it can be explained in figure below (Fig. 5).

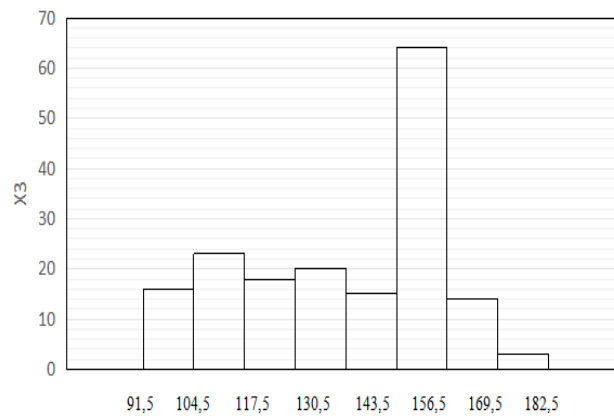


Figure 5.
Histogram of self efficacy (X₃)

Before the data is analyzed in hypothesis testing, all data are tested with analysis prerequisite tests. Each of these tests is the Normality Test, Homogeneity Test, and Linearity Test.

Normality Test using Liliefors Test, each against the pair of Regression Estimation Error variables. All Normality tests of the variable pairs show that the data are normally distributed (Table 2).

Table 2.
Results the Liliefors normality test

Galat Taksiran Regresi	n	L hitung	L tabel (= 0,05)	Keterangan
Y atas X1	173	0,077	0,078	Normal
Y atas X2	173	0,078	0,045	Normal
Y atas X3	173	0,078	0,068	Normal
X2 atas X1	173	0,13	0,11	Normal
X1 atas X3	173	0,15	0,13	Normal
X2 atas X3	173	0,19	0,16	Normal

Homogeneity Test to test whether the data is obtained from the same population sample. The test uses the Bartlett Test on each pair of variables. This test consists of calculating the combined variance, Bartlett score, and Chi-Square significance. The following is a recapitulation of the homogeneity test on each pair of variables (Table 3) showing that all data is homogeneous.

Table 3
Result of the Bartlett Homogeneity test

Variabel	n	Varian Gabungan	Harga Bartlett	Chi-Square Hitung	Chi-Square Tabel	Sig.	Keterangan
Y atas X1	173	12,37	12,37	0,25	143,58	p>0,05	Homogen
Y atas X2	173	12,09	134,24	1,39	143,58	p>0,05	Homogen
Y atas X3	173	11,13	124,54	1,52	143,58	p>0,05	Homogen
X2 atas X1	173	23,19	211,64	0,98	143,58	p>0,05	Homogen
X1 atas X3	173	25,42	214,99	0,15	143,58	p>0,05	Homogen
X2 atas X3	173	22,69	164,06	1,61	143,58	p>0,05	Homogen

Linearity test using SPSS through compare on the Deviation from Linearity with level of significant such > 0,05 level. Results of tests it can be explained in table 4 below (Fig. 4).

Table 4.
Linearity tests using SPSS

Regresi		Sum of Squares	df	Mean Square	F	Sig.	Ket.
Y atas X1	Deviation from Linearity	1.874.181	18	104.121	0,656	0,85	Linier
Y atas X2		5.438.283	49	110.985	0,667	0,946	Linier
Y atas X3		9.849.396	52	189.411	1,364	0,085	Linier

Hypothesis testing stage, the study model in Path Analysis will be in accordance with the research design consisting of three Exogenous Variables (X_1 , X_2 , X_3) and two Endogenous Variables (X_3 and Y). The design is as in the picture below (Figure 6).

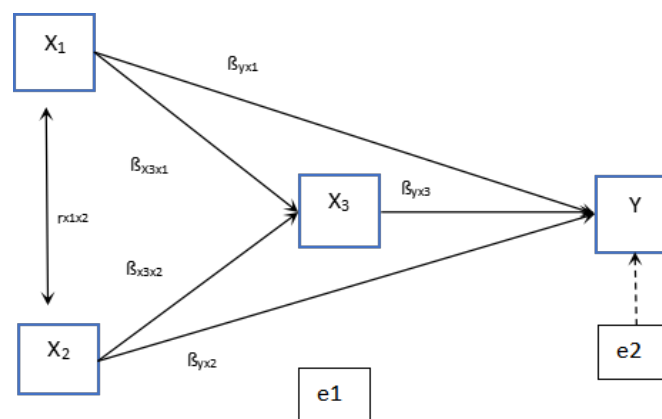
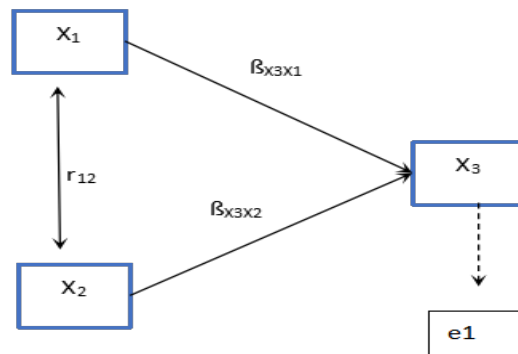


Figure 6.
Causality model between exogenous and endogenous variables

The structural path analysis model between exogenous and endogenous variables is in accordance with the research hypothesis. The path diagram above consists of 2 (two) sub-structures as follows Fig.7.

1. Model Sub-structural 1

The structural relationship between X1, X2, and X3 can be described as follows below (Figure 7)



Gambar 7.
Model sub-structural 1

The structural equation is expressed by:

$$X_3 = \beta_{X_3X_1}X_1 + \beta_{X_3X_2}X_2 + e_1$$

Overall testing through the Anova test shows that there is an overall positive direct influence on sub-structure 1, with a calculated F value of 3.023 at a significance level of 0.005 ($p < 0.05$), as can be seen in Table 5 below.

Table 5 .ANOVA Overall sub-structural 1

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3828.228	2	1914.114	3.023	.005 ^a
Residual	107645.807	170	633.211		
Total	111474.035	172			

a. Predictors: (Constant), Transformasional leadership (X₂), Educational technology competency (X₁)

b. Dependent Variable: Self Efficacy

Furthermore, through individual tests as in the table below, the Educational Technology Competence Variable (X₁) has a path coefficient of 0.131 on Self-Efficacy (X₃) with a significance t-test of 0.009 ($p < 0.05$). Likewise, the Transformational Leadership variable (X₂) has a path coefficient of 0.109 on Self-Efficacy (X₃) with a significance t-test of 0.001 ($p < 0.05$).

Tabel 6 . Individualtest sub-structural 1 path Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	101.840	17.091		5.959	.000

Educational technology competency (X ₁)	.770	.452	.131	1.704	.009
Transformasional leaderships (X ₂)	.113	.079	.109	1.425	.001

a. Dependent Variable: Self Efficacy (X₃)

Hypothesis 1:

Ho: $\beta_{X31} < 0$ There is no direct positive influence of X₁ on X₃

H1: $\beta_{X31} > 0$ There is a direct positive influence of X₁ on X₃

Based on table 6 above, the conclusion of Hypothesis 1 is Reject Ho, which is $0.131 > 0$ that There is a direct positive influence of Educational Technology Competence (X₁) on Self-Efficacy (X₃).

Hypothesis 2:

Ho: $\beta_{X32} < 0$ There is no direct positive influence of X₂ on X₃

H1: $\beta_{X32} > 0$ There is a direct positive influence of X₂ on X₃

Based on table 7, the conclusion of Hypothesis 2 is Reject Ho, which is $0.109 > 0$; that there is a direct positive influence of Transformational Leadership (X₂) on Self-Efficacy (X₃).

Meanwhile, in table 7, the contribution value or coefficient of determination (r²) is 0.034, so it has a contribution of the influence of the Educational Technology Competence and Transformational Leadership variables on Self-Efficacy of 3.4%.

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.185 ^a	.034	.023	25.16368

a. Predictors: (Constant), Transformational leaderships, Educational technology competency

From the magnitude of the contribution, it can explain the magnitude of Endogen 1 (e1). With the formula $e = \sqrt{(1 - R^2)}$, so that e1 can be determined as follows; $\sqrt{(1 - 0.034)} = 0.983$. This explains that there is another influence of 0.983 on Self-Efficacy (X₃) (Fig. 8).

Based on the description above, the sub-structural model 1 has the following equation:

$$X_3 = 0.131X_1 + 0.109X_2 + 0.983$$

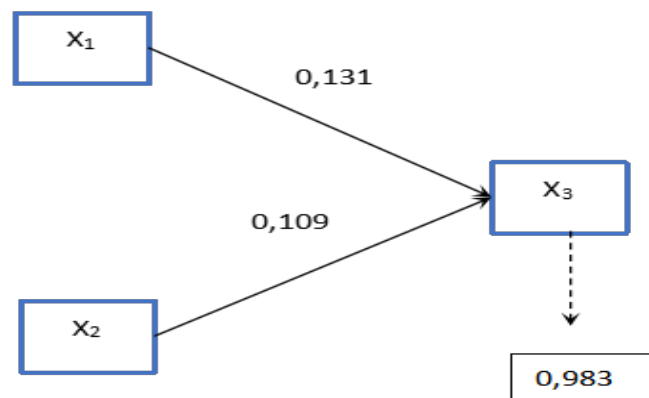
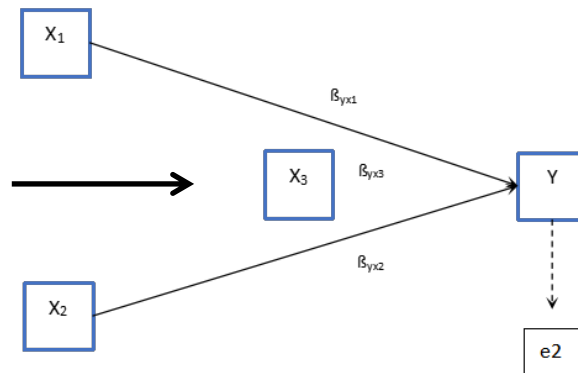


Figure 8.
Path coefficient sub-structural 1

2. Model Sub-Structural 2

Relationship model of structural amongs X₁, X₂, X₃, and Y it can be explained below (Fig. 9).



Gambar 9
Model sub-structural 2

The structural equation is expressed by:

$$Y = \beta_{yx1}X_1 + \beta_{yx2}X_2 + \beta_{yx3}X_3 + e_2$$

Overall testing through the Anova test shows influence between X₁, X₂, X₃, and Y with a calculate of 0.05 (p<0.05) which can be seen in Table 8 below Table 8. Overall test with ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	10150.541	3	3383.514	28.040	.000 ^a
Residual	20392.777	169	120.667		
Total	30543.318	172			

a. Predictors: (Constant), Selt-Efficacy, Transformational leardership, Educational technology competency

b. Dependent Variable: Teacher’s Professional Commitment

Furthermore, through individual tests as in table 9 below, the Educational Technology Competence (X₁) has a path coefficient of 0.278 towards Professional Commitment (Y) with a significance t test of t = 4.311 (p <0.05). Likewise, the Tranformational Leadership (X₂) has a path coefficient of 0.306 towards Professional Commitment (Y) with a significance t test of t = 4.76 (p <0.05), and the Self-Efficacy (X₃) towards Professional Commitment (Y) with a path coefficient of 0.286 with a significance t test of 4.477 (p <0.05).

Tabel 9. Individual test path coefficient

Model	Unstandardized Coefficients		Standar dized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	68.713	8.203		8.377	.000

Educational technology competency (X ₁)	.857	.199	.278	4.311	.000
Transformational leadership (X ₂)	.166	.035	.306	4.760	.000
Self-Efficacy (X ₃)	.150	.033	.286	4.477	.000

a. Dependent Variable: Teacher's professional commitment (Y)

Hipotesis 3:

Ho: $\beta_{yX_1} < 0$ Tidak Terdapat pengaruh positif langsung X₁ terhadap Y

H₁: $\beta_{yX_1} > 0$ Terdapat pengaruh positif langsung X₁ terhadap Y

Based on table 9 above, the conclusion of Hypothesis 3 is to reject Ho, such $0.278 > 0$ that there is a direct positive influence of Educational Technology Competence (X₁) on Professional Commitment (Y).

Hypothesis 4:

Ho: There is no direct positive influence of X₂ on Y

H₁: There is a direct positive influence of X₂ on Y

Based on table 9 above, the conclusion of Hypothesis 4 is to reject Ho, such $0.306 > 0$ that there is a direct positive influence of Transformational Leadership (X₂) on Professional Commitment (Y).

Hypothesis 5:

Ho: There is no direct positive influence of X₃ on Y

H₁: There is a direct positive influence of X₃ on Y

Based on table 9 above, the conclusion of Hypothesis 5 is to reject Ho was $0.286 > 0$ that there is a direct positive influence of Self-Efficacy (X₃) on teacher's Professional Commitment (Y).

Tabel 10. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.576 ^a	.332	.320	10.98487

a. Predictors: (Constant), Self-Efficacy, Transformational leadership, Educational technology competency

Based on Table 10 on the Summary Model, the R² value of the Determination Coefficient or contribution is 0.332. So it has a contribution of the influence of the variables of Educational Technology Competence and Transformational Leadership and Self-Efficacy of 33.2% on Professional Commitment.

- known X₁ Beta standard coefficient 0.278

- known X₂ Beta standard coefficient 0.306

- known X₃ Beta standard coefficient 0.286

- The value of e₂ can be found as follows;

$$\sqrt{(1-0.332)} = 0.823$$

The equation model

$$Y = 0,278 X_1 + 0,306 X_2 + 0,286 X_3 + 0,823$$

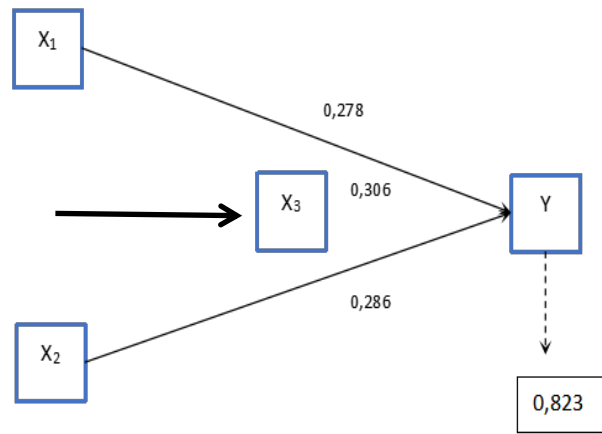


Figure 10.
Path coefficient of model sub-structural 2

Hypothesis 6:

Ho: There is no indirect positive influence of X1 on Y through X3

H1: There is an indirect positive influence of X1 on Y through X3

Variable X1 influence on Y indirectly through X3. Path coefficient of the indirect influence that occurs through X3 was $(0.131) + (0.306) = 0.437$. Thus, the total influence of X1 on Y was 0.437.

Hypothesis 7:

Ho: There is no indirect positive influence of X2 on Y through X3

H1: There is an indirect positive influence of X2 on Y through X3

Variable X2 influence Y indirectly through X3. Path coefficient of the indirect influence that occurs through X3 is $(0.109) + (0.306) = 0.415$. Thus, the total influence of X2 on Y was 0.415.

Based on the description above, the overall model can be described below (Fig. 11).

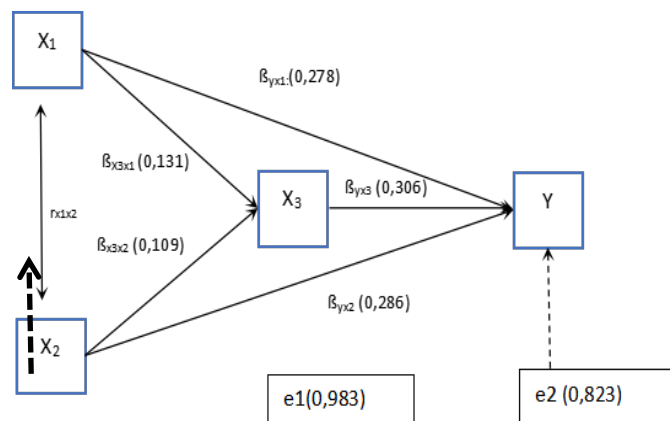


Figure 11.
Overall Model

Discussion

Based on the path coefficient value and correlation coefficient for educational technology competence (X1) on teacher professional commitment (Y) of 0.278, it means that educational technology competence has a 2.78% effect on increasing teacher professional commitment in multicultural education.

Educational technology competence is the ability to master new concepts about learning, especially the development of learning media that can be adaptive to students' cultural needs. This is in line with the oldest professional organization of educational technology, namely the

Association for Educational Communication and Technology (AECT, 2004), so the qualifications possessed by the educational technology above, namely competence that refers to the ability to develop media and/or learning resources, from conventional to the use of information and communication technology (ICT) for an educational institution independently.

This is also supported by research by Pratiwi, M., et al. (2023), that technological competence and ability have an effect on improving teacher professionalism in the case study of SMK Budi Mulia Kotobaru. The regression coefficient of 0.339 and the R Square value of 0.762 indicate that 76.2%. Likewise, research by Argyanti, A., et al. (2023), that the application of educational technology for the teaching profession in vocational high schools.

Istiadi, Y., et al. (2020), in the study Educational Board Game Development to Increase the Knowledge of Local Wisdom, explained that educational board games as a learning medium with an environmental education approach for the Kasepuhan indigenous community around the Gunung Halimun Salak National Park. The board game depicts local knowledge in the form of philosophy, values, norms, behavior, and community environment. The results of this study indicate that there is an influence of educational technology competence on teacher professional commitment.

The effect of transformational leadership (X2) on teacher professional commitment (Y) is 0.396, which indicates that if transformational leadership increases, teacher professional commitment will be higher. According to Daft (2015), transformational leadership has the ability to lead changes in the vision, strategy, and culture of the organization and promote innovation in products and technology. Likewise, Burns as quoted by Naguib and Naem (2018) stated that: Transformational leadership is a major determinant of innovation, follower morality and motivation by four dimensions: idealized influence, intellectual stimulation, inspirational motivation, and individual consideration.

From the research results of Sabariah, et al. (2024), that transformational leadership can increase the motivation and commitment of teachers at Madrasah Aliyah Negeri 5 Banjar. This shows that transformational leadership has proven effective in building positive relationships between principals and teachers. Likewise with Al Faruq, M. H (2020) in the article on the transformational leadership of principals in improving teacher quality. This is in line with Setiawan, A. P, et al. (2024), that increasing commitment to the teaching profession can be effective through transformational leadership in research on commitment to the profession in public elementary school teachers in Cileungsi District, Bogor Regency.

The self-efficacy variable in this study has a path coefficient value and correlation coefficient for self-efficacy (X3) on teacher professional commitment (Y) of 0.369, indicating that if self-efficacy increases, the teacher's professional commitment will be higher. This is also in line with Cahyaningrum, V.D., et al (2023), that the influence of self-efficacy on teacher professional commitment in a study at Tarakanita Pluit School, Jakarta was 31.6%. This indicates that low self-efficacy can reduce professional commitment if not supported by educational institutions (Zuraida, Ida et al., 2020).

Baron and Bryne (in Ghufroon & Risnawita, 2014) explained that self-efficacy is an individual's evaluation of their ability or competence in carrying out tasks, achieving goals and overcoming challenges. Chasanah, N. A, et al., (2023) in their research stated that there is an influence between self-efficacy and the professional commitment of teachers at SD Negeri Kecamatan Bogor Selatan Kota Bogor.

Likewise, educational technology competence has an effect on self-efficacy. The effect in this study was obtained at 0.278 or 2.78%. According to Saienko, N. et al., (2020) that the impact of Educational Technology on Lecturer Self-Efficacy. Furthermore, it is explained that through short training, it can improve the application of technology in teaching. However, challenges such as computer anxiety in senior teachers and limited understanding of technological pedagogy in novice teachers need to be overcome to optimize results (Jingxuan et al., 2024).

In a study in China, that Chinese elementary school mathematics teachers' self-efficacy for technology integration: Development and validation of a multifaceted scale. This study developed the Mathematics Teacher Technology Integration Scale (SMTTI) as a valid and reliable measuring instrument to assess teacher self-efficacy (Li, Mao, 2024).

In addition to the above, teacher efficacy is also influenced by the Influence of transformational leadership factors. In this study, a path coefficient of 0.134 or only 1.34% was obtained but had a strong meaning in the formation of teacher efficacy. In their book, Griffin and Moorhead (2014), transformational leadership is the ability of leaders to recognize the need for change, create a vision, guide change, and implement change effectively. Even Rowe and Guerrero (2011) and Vermeulen, Marjan et al., (2015) explain that transformational leadership plays a role in the process of organizational dynamics.

The finding of a positive and significant relationship between transformational leadership and teacher efficacy in this study is supported by Van Dat Tran et al., (2024), that this influence in Vietnam shows that the principal's transformational leadership has a significant positive effect on teacher self-efficacy in terms of teaching strategies, classroom management, and student engagement in Vietnamese secondary schools.

CONCLUSION

1. Educational technology competence has a direct positive effect on teachers' professional commitment in multicultural education,
2. Transformational leadership has a direct positive effect on teachers' professional commitment in multicultural education,
3. Self-efficacy has a direct positive effect on teachers' professional commitment in multicultural education, .
4. Educational technology competence has a direct positive effect on self-efficacy.
5. Transformational leadership has a direct positive effect on self-efficacy.
6. Educational technology competence has an indirect effect on teachers' professional commitment in multicultural education through self-efficacy,
7. Transformational leadership has an indirect effect on teachers' professional commitment in multicultural education through self-efficacy

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