

The role of education management, learning teaching and institutional climate on quality of education: Evidence from Indonesia

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CHRONICLE

ABSTRACT

Article history:

Received: March 15, 2019
Received in revised format: April 19 2019
Accepted: April 29, 2019
Available online:
May 1, 2019

Keywords:

*Principle
Management Basic
Improvement
Education Quality
CFA
Structural modelling
School climate*

The basic principle of management is to manage resources of the organization effectively and efficiently to achieve the organization's objectives. The function of management includes: planning, organizing, placing people, directing and controlling different tasks. The four important cases in improving education quality are, first, national policies which covers curriculum, national exam, teacher's distribution and recruitment. Second, headmaster's leadership which covers financial transparency, the ecosystem relationships which run in school between teachers and headmaster, parents with teacher, or teacher with students and all existing educational staffs in educational units. Third, infrastructure which covers facilities and infrastructures associated with class, laboratory, or informational technology and communication. Fourth, fun learning process, innovation and creativity, potential, skill and teacher's ability. The study provides an empirical view for the relationship between educational learning and leadership management, learning teaching, school climate and overall quality of education in the region of Indonesia. Both CFA and structural equation modelling techniques are applied for the causal effects of the selected explanatory variables on quality of education. Findings of the study indicate that educational learning and leadership management, learning teaching and school climate influence on quality of education, positively.

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1. Introduction

Nowadays, any institution organizes education cannot ignore the quality in conducting its educational activity programs, because planning and implementation of educational policies are based on the vision and mission of institution. Finally, educational quality relates to what is produced and who is using education. According to Lao et al. (2018), quality contains different characteristics and levels. Service quality in educational field is different for its dimension with production goods. Dimension of quality on service consists of reliability, assurance, access, communication, responsiveness, courtesy, behaved, empathy and tangible (Chowdhary & Prakash, 2007; Nekoei-Moghadam & Amiresmaili, 2011; Zeithaml et al., 1990). Quality management and total quality management are important methods to improve performance continuously. Those cases are derived by using human resources, and availability of capital on every level of operation and process (Holmes & McElwee, 1995; Morrison, 1996; Worsfold, 1999). Quality improvement is the responsibility of all management levels, but the controller is top management, although in its implementation, it has to involve all of organizational components on each hierarchy. Educational field is perceived as service industry, therefore, service is ensured to have customers both

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internal customers and external customers. Thus, the term of education total quality is known as Total Quality Education (TQE). It defines the case mentioned in the end, Hovell et al. (1999) and Sallis et al. (1997) explained “*Situation with a set of practical tools for meeting and exceeding present and future customers need, wants and expectation*”. This definition emphasizes on two major concepts, first is as philosophy of continuous improvement, and second, it relates to means and techniques used to improve quality, in order to fulfill the customer’s expectations. Quality management in education, means to prioritize and satisfy the students by creating constructive educational atmosphere. The most important emphasize is on changing the school’s culture to reach Total Quality School (TQS) (Biggs, 2011; Blankstein, 2004; Everard et al., 2004; Louis et al., 2010). The concept application of total quality management in education must be adjusted to basic characteristics of its school. The primary objective is to produce graduates who are in accordance with customers’ demands and expectations.

Besides, it is as education organizational institution, school is also social institution and as a social unit, school performs a task to do society enculturation process that centered on learning process. In other words, school is agent of social change. School is expected to be able to create competitive advantages with the high quality. There are many definition on total quality management concept. Sallis (2014) defined as *total quality management is philosophy and methodology which assists institution to manage change and to set their own agendas for dealing external pressures*. This opinion states that total quality management is philosophy; it is methodology that helps an institution in managing the change and arrange the agenda to face the pressures of external factors. Those concepts emphasize on “totality” that has connotation of all systems. Both process and personnel, include product or service user and supplier. In other words, this concept emphasizes on comprehensive process, in order to satisfy customers. Total quality management is strategic approach and organizational practice which is focused on customer’s or client’s interests. Total quality management includes constant innovation, program change, and the emphasis on certain program, quality of manager, responsibility, and freedom to creativity in the context of work. Total quality management is closely related to cultural change. Cultural change refers to attitude change and work method. There are two important cases in this change. First, necessity for staff inside and outside of work environment; and second, work attitude is supported by educational background and cultural environment to get work success. Qualified product starts from understanding qualified philosophy that is applied in total quality management. In educational context, it needs to be understood previously that educational institution is basically service industry. Through satisfaction service to customer, it is expected can add benefit and advantage in various forms. Besides, it needs also to be understood that educational institution product is educational service. Its quality standard is appropriateness of its product’s characteristics with customer’s needs. So, to produce qualified product, system and process must get the main attention. Total quality management has flexibility characteristic. Each organization can reach it by the way itself, it is different with others. In other words, it can be adjusted to fulfill need and environment, particularly for each institution either big or small institution. Therefore, there is no literature discusses about how an institution achieves comprehensive quality for institution itself. Besides, some studies have also explained the quality in the field of education and learning for the students (Barnett, 1992; Boyle & Bowden, 1997; Clements et al., 2015; Coates, 2005; Elassy, 2015; Glasser, 1990; Harman, 2015; Noaman et al., 2017; Popham, 1999; Stalmeijer et al., 2016; Thune, 2017).

2. Literature review

Etymologically, it is explained that management derives from ancient French language; management means art of doing and controlling. Tumiran (2018) explains that management is a process of planning, organizing, actuating, coordinating, and controlling of resources to achieve goals effectively and efficiently. Effective means the goal can be achieved according to predetermined plan, while efficient means the existing task is done correctly, well-organized and also it depends on predetermined schedule. The term of strategy derives from Latin language, which is *Strategos*. In the beginning, *strategos* refers to activity of Military general who combines *stratos* (military) with ego (lead). This strategy means as activity to lead military in conducting tasks. According to Evered (1983) strategy is *the art of planning*

operation in war, skill in managing any affair, tactic. Term of strategy is used in military field which is art of planning of various war operations. Nichols (2017) mentions that *strategy often refers to maneuvering troops into position before the enemy is actually engaged.* Strategy is also related to deployment of soldiers in a strategically position before the enemy knows them.

When the enemy starts to know or against, the attention is transferred to tactic. Therefore, according to, who (Bull, 1968) *strategy is the art of the employment of battles as a means to gain the object of war.* It is also defined as skill or tactic in managing activity. Those definitions become basic from strategy definition which is adjusted from the use of development strategy concept in business organization, non-profit organization, and public sector, like education and healthy. According to Casadesus-Masanell and Ricart (2010), Fazio et al. (2016), and Yuan et al. (2015), the use of strategy concept in business organization is started to use resources more appropriately. In its development until now, the word of strategy itself is used for explaining the stage conducted by organization in achieving its target and mission. Strategic decision is very determining of a success of an institution in mission achievement. Therefore, a strategic decision must fulfil some necessary characteristics, such as strategic decision that covers the whole of organizational components, which can be accomplished from top management to employee. Strategic decision must have sufficient carrying capacity, both human resources management, financial and other information. Finally, strategic decision must have impact for the long time period.

The development of educational field describes strategic mission is running. The equity of education is more felt that school establishment has strategic function for the quality improvement of citizen, also the dignity of Indonesia people. The effort to repair the sustainability of the quality of education needs integrate. It means all primary educations, secondary education, and colleges, also non-formal education must be integrated to become a center of excellence. Therefore, all of educational paths in their functions and activity process must depend on the achievement of national educational goals. The goals are embodied in Constitution No. 20 of 2003 is about National Education System, which is educate and develop Indonesian completely, which is human who believes and fears God and noble character, has knowledge and skill, has physical and spiritual health, a solid and independent personality and a sense of community responsibility. Society empowerment is marked by some cases, like physical and spiritual health, strong and educated, and has intrinsic values as source of empowerment. Those intrinsic values include different issues such as family characteristics, mutual cooperation, and diversity. There are some community asset as indicator that needs to be understood in empowerment process, such as human capital. This capital represents knowledge unsure, perspective, mentality, skill, education, work ability, and society condition that is useful to improve the quality of life in society. Physical capital is another requirement which represents building unsure, like housing, market, school, hospital, and basic infrastructure like street, bridge, drinking water network, telephone network, and which all of them are infrastructure that helps society improve the quality of life. Financial capital is another aspects which represents financial sources elements that exist in society, like salary, saving, regular funding, business capital loan, securities certificates, etc. and can be used to support the degree of society life. Technological capital, which represents system or software that completes physical capital like irrigation technology, water filtration technology, food technology, remote printing technology and other technologies which can be used to improve society's prosperity. Environmental capital represents natural resources and biological resources that covers a society. Social capital is associated with social resources, like social network, society trust, social bonds, etc., which is useful to help society fulfill the living needs. According to Hikmat (2001) the effort of society empowerment needs to notice at least four basic elements, which are: first, accessibility of information; because information is new authority that relates to chance, service, law enforcement, and effectiveness of negotiation. Second, participation involvement; it concerns to who is involved and how it is involved in the whole development process. Third, accountability which is associated with public accountability for all of activities conducted on behalf of the people. Fourth, local organizational capacity which is associated with the ability to work together, organize society and also mobilize resource to solve problems faced. According to *Service First the New Character Programme*, which is famous in England,

there are nine principles of service provision including determine service standard; act to open and provide of detail information; consulting and involved; support the choice access; treat all fairly; returning to the right path when it happens wrong; make use of resource effectively; innovative and fixing; and cooperate to other service provider. Standard service becomes the key factor in the effort of improving service quality.

3. Methods and sample of the study

This study uses applied questionnaire approach to analyze the impact of educational leadership and management, learning teaching, and school climate for quality of education in Indonesia. For this purpose, various items have been added in the questionnaire, indicating the explanatory and outcome factors. For educational learning and leadership management (ELDM), six items are added covering the title of clear vision from head of institute (ELDM1), consulting staff for needs and challenges of the institute (ELDM2), promotion of team work by senior management at institute (ELDM3), opportunity to take leadership roles (ELDM4), promotion of good practices among staff by senior management (ELDM5), and provision of effective feedback by senior management (ELDM6). For learning and teaching, items like literacy, digital literacy (D.Literacy), learning to learn and cooperative learning (L2LCL), education for sustainable development (E4SD), education for entrepreneurship, creativity and innovation (E4EINO) and education for diversity (E4DIV) are added in the model. For school climate, five items under the title of promoting confidence and self-esteem in learners (PCSE), appropriate resources to support learners (AR2SL), resources are fairly distributed among staff (RFDAS), provide learners with effective personal and career guidance (PLEPCG), and individual educational programs (IEPS). While the factor of quality of education (QOFEDU) has considered nine items under the title of support to student learning (STOSTUL), support to students through counselling service (STOSTUCS), support to teaching and learning environment (STLE), support to organization management programs (STORG), teaching awards for good teachers (TAFGT), funds to promote motivational teachers (FTOPMT), professional development for pedagogy design (PDESIGN), program monitoring and implementation (PMIMP), continuing education for faculty (CEFF) are added in the model. Meanwhile, questionnaire is equipped with demographic details, covering the title of job title, age, gender, qualification, and working profile. After the development of questionnaire, it was distributed to the targeted individuals for data collection. A time period of two weeks was specified to collect the data. Detailed analysis of data screening is presented under analysis portion.

4. Results and discussion

Table 1 presents the details of the demographic dimensions of selected respondents in the field of education. It is found that from overall sample of 268 respondents, 158 are school teachers, covering percentage sample of 58.95, 41 are lecturer, 30 are professors, and 39 are student counsellor. As per age distribution, four categories have been defined and respondents were asked to provide their relevant information. From overall sample of 268, 140 are in range of 20-30 years of age, 38 are in 31-40 years, 31 are those who are in age range of 41-50 years, while 59 are above 51-60 years. As per gender class, 175 respondents covering a percentage sample of 65.30 indicating male category, while 93 belongs to female category, covering a sample portion of 34.70 percent. As per level of education, 140 have done their master's degree, 81 has completed their master with other diploma, and 47 have completed their higher education. From the title of occupation, 189 are government employees indicating a sample portion of 70.52 percent while 79 are covering 29.48 percent of sample percentage with private sector.

Table 2 presents the screening process of the data as collected through questionnaire approach. It was found that overall 325 questionnaire were distributed at first for a period of 3 weeks. Respondents were requested to provide their respondents with full of devotion and unbiased. After provided time period, questionnaires were collected. From 325 copies, overall 315 copies were finally collected. While in depth analysis of collected copies indicates that 47 questionnaires have their missing responses and they were

dropped from the sample. A final sample of 268 questionnaires were found to be valid for the further analysis. Table 2 depicts this information.

Table 1
Demographic Details

Working Title	Frequency	Percent	Cumulative Percent
School Teacher	158	58.95	58.95
Lecturer	41	15.29	74.24
Professor	30	11.19	85.44
Student Counsellor	39	14.56	100
Total	268	100	
AGE	Frequency	Percent	Cumulative Percent
20 - 30 Year	140	52.24	52.24
31 - 40 Year	38	14.18	66.41
41 -50 Year	31	11.57	77.98
51 - 60 Years old	59	22.02	100
Total	268	100	
Gender	Frequency	Percent	Cumulative Percent
Male	175	65.30	65.30
Female	93	34.70	100
Total	268	100	
level of Education	Frequency	Percent	Cumulative Percent
Master level	140	52.24	52.24
Master+ Diploma	81	30.22	82.46
Higher Education	47	17.54	100
Total	268	100	
Occupation	Frequency	Percent	Cumulative Percent
Government Employed	189	70.52	70.52
Private Sector	79	29.48	100
Total	268	100	

Table 2
Data screening

Details	Number of questionnaires	Percentage
Total questionnaires distributed	325	100%
Total questionnaire received	315	96.92
Questionnaire with missing values	47	14.92
Usable questionnaire	268	85.07

Table 3 presents the findings for descriptive statistics of the study. Overall, 268 respondents from the teaching field are under observation for the empirical results. The range of responses is from 1 to 5, reflecting the measurement of data on five-point Likert scale. For most of the items under questionnaire, mean value is near to four, reflecting the fact that respondents agreed on the Likert scale for each of the stated queries. Standard error in the mean value is highest for digital literacy which is .082 and for learning and for 0.083 for cooperative learning, respectively. Standard deviation from the mean is also presented under Table 3, explaining the level of risk in mean score. Meanwhile both Skewness and Kurtosis are also presented under Table 3.

Table 3
Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation		Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error	
ELDM1	268	1.00	5.00	4.4627	.06879	1.12617	-.382	.149	-.576	.297	
ELDM2	268	1.00	5.00	4.6381	.08507	1.39272	.324	.149	-1.143	.297	
ELDM3	268	1.00	5.00	4.0149	.07859	1.28655	-.102	.149	-1.020	.297	
ELDM4	268	1.00	5.00	4.1604	.07789	1.27509	-.249	.149	-1.026	.297	
ELDM5	268	1.00	5.00	4.2799	.07551	1.23618	-.247	.149	-.945	.297	
ELDM6	268	1.00	5.00	4.0858	.07815	1.27938	-.151	.149	-1.038	.297	
Literarcy	268	1.00	5.00	3.2575	.07488	1.22587	-.343	.149	-.777	.297	
D.Literarcy	268	1.00	5.00	4.2761	.08255	1.35133	-.339	.149	-1.090	.297	
L2LCL	268	1.00	5.00	4.9254	.08313	1.36091	.091	.149	-1.125	.297	
E4SD	268	1.00	5.00	4.8507	.08393	1.37395	.141	.149	-1.219	.297	
E4EINO	268	1.00	5.00	4.9104	.06727	1.10133	-1.008	.149	.441	.297	
E4DIV	268	1.00	5.00	3.8769	.06634	1.08607	-.884	.149	.133	.297	
PCSE	268	1.00	5.00	4.7201	.07249	1.18671	-.608	.149	-.598	.297	
AR2SL	268	1.00	5.00	4.8881	.06329	1.03613	-.771	.149	-.048	.297	
RFDAS	268	1.00	5.00	4.7164	.06629	1.08522	-.621	.149	-.273	.297	
PLEPCG	268	1.00	5.00	4.6157	.07243	1.18577	-.509	.149	-.650	.297	
IEPS	268	1.00	5.00	4.6604	.06604	1.08116	-.581	.149	-.266	.297	
STOSTUL	268	1.00	5.00	3.7873	.06696	1.09626	-.824	.149	.118	.297	
STOSTUCS	268	1.00	5.00	4.7127	.06821	1.11657	-.585	.149	-.460	.297	
STLE	268	1.00	5.00	4.7090	.06617	1.08324	-.611	.149	-.343	.297	
STORG	268	1.00	5.00	4.7164	.06056	.99144	-.661	.149	.051	.297	
TAFGT	268	1.00	5.00	4.6157	.06226	1.01932	-.456	.149	-.434	.297	
FTOPMT	268	1.00	5.00	4.7724	.06110	1.00022	-.729	.149	.308	.297	
PDESIGN	268	1.00	5.00	3.7351	.06996	1.14524	-.657	.149	-.409	.297	
PMIMP	268	1.00	5.00	4.8209	.06490	1.06247	-.750	.149	-.014	.297	
CEFF	268	1.00	5.00	4.4851	.07200	1.17868	-.434	.149	-.658	.297	

Table 4 shows the reliability analysis of the questionnaire. It is observed that the major dependent variables are under the title of educational leadership and management, learning and teaching, and school climate. While quality of education is assumed to be the dependent variable. Value of Cronbach's alpha for each of the variable is above .80 indicating the fact that all the items are reasonably measuring the stated queries and overall variables of the study. Hence, all items are good enough for the further analysis.

Table 4
Reliability Analysis

Factors	Cronbach's Alpha	N of Items
Educational leadership and Management	0.81	06
Learning and Teaching	0.89	06
School Climate	0.83	05
Quality of Education	0.88	09

After reliability analysis, measurement model has been specified through confirmatory factor analysis (CFA). This approach helps to examine the internal reliability and validity of the construct and key items in the questionnaires. The present study has considered educational leadership and management through six items, learning and teaching through 6 items, and school climate through five items as the main explanatory variables. While quality of education is the outcome factor covered through nine items. CFA also helps to understand the ability of developed construct. Model 1 below indicates the structural pattern of all explanatory variables along with their respective items and error terms. This model is developed in AMOS-22. It is observed that all explanatory variables are correlated to examine the level of covariances among them. CFA generates factor loading for each item under explanatory variables, providing an outlook for their relative importance. Error terms are presented e1 to e17 covering all items of the model. After the development of structural model for CFA, factor loadings through standardized estimates are generated and presented under Fig. 2. It is found that for educational leadership and management, factor

loading for each of the item is within the range of .70 to .90, indicating a good level of factor score. Highest loading for educational leadership and management belongs to ELDM6 which is equal to .89. For learning and teaching, factor loadings for each item is above .70, showing the significance in the model. The highest loading belongs to learning to learn and cooperate learning (L2LCL) is equal to .89 while the lowest loading belongs to literacy which is equal to .72. for school climate and all items also present reasonable factor loading which are well above .70. For quality of education, Fig. 3 presents structural model with all nine items and error terms. Fig. 4 shows their factor loadings. It is observed that all items for quality of education have also shown significant loading scores, providing their reasonable addition in the structural model and further analysis. In addition, findings for the CFA goodness of fit like Chi-Square, RMSEA, adjusted goodness of fit index known as AGFI, comparative fit index or CFI, and tucker Lewis Index or TLI are also presented under Table 4. It is found that all measures are in acceptable range, providing no serious problem for the CFA and relevant factor score of each item. For quality of education, goodness of fit indices are presented under Table 5.

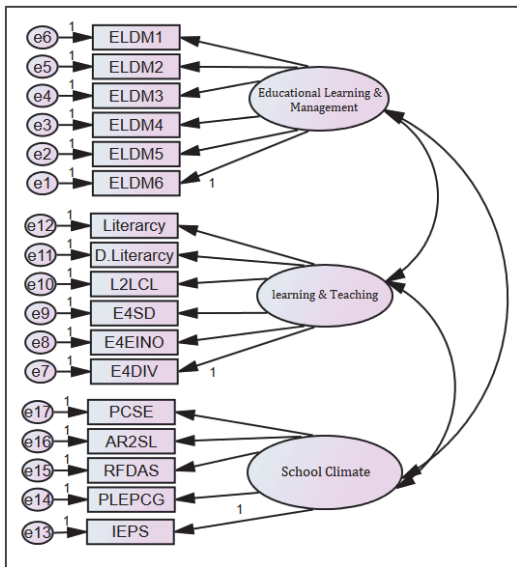


Fig. 1. CFA for explanatory variables

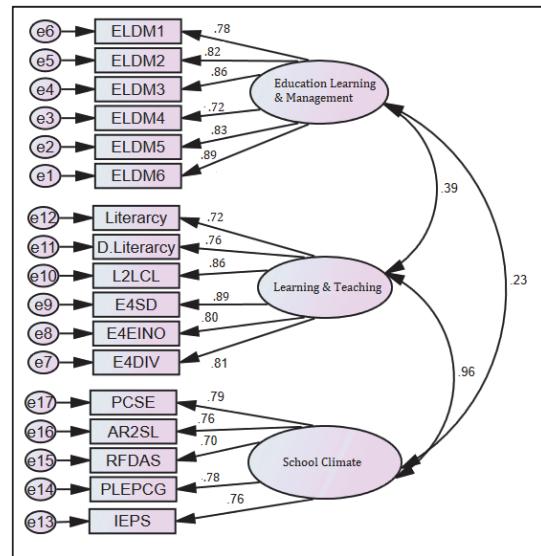


Fig. 2. Factor Loadings for explanatory variables

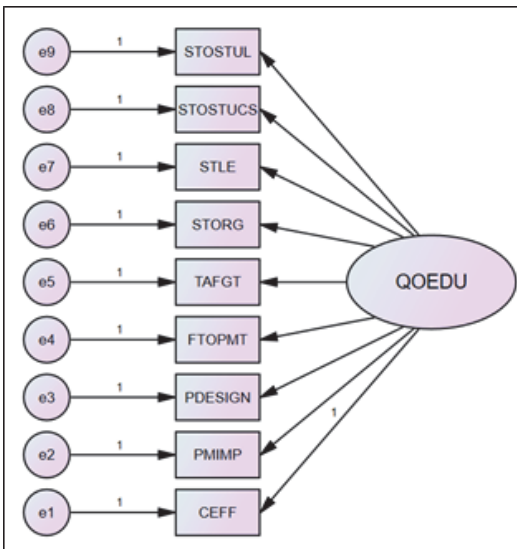


Fig. 3. CFA for outcome variable

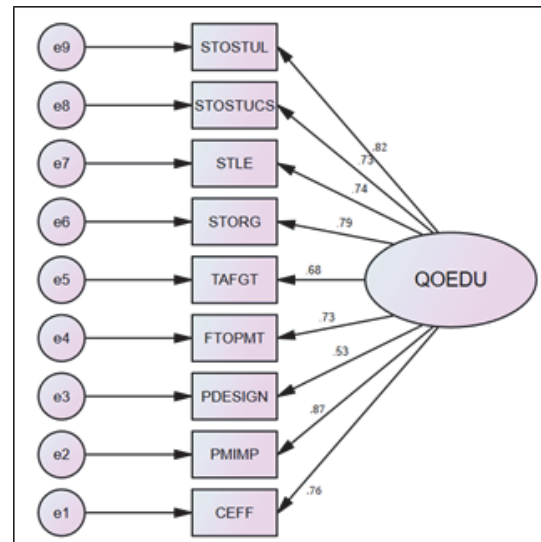


Fig. 4. Factor Loadings for explanatory variables

Table 5
Goodness of fit for explanatory variables

Indices	Result	Decision
Chi-Square	285.140	Accepted
Root mean squared error or approximation RMSEA	.046	Accepted
Adjusted goodness of fit index or AGFI	.918	Accepted
Comparative fit index or CFI	.935	Accepted
Tucker Lewis index or TLI	.914	Accepted

Table 6
Goodness of fit for Quality of Education

Indices	Results
Chi-square	99.891
Degrees of freedom	27
Probability level	.000***
CFI	.918
AGFI	.891
TLI	.890

Fig. 5 indicates the structural equation model of the study. Three major explanatory variables are educational learning and leadership management (ELDM), learning and teaching (LTT), and school climate (SCLIMATE). The factor of ELDM has six further dimensions ranging from ELDM1 to ELDM6. LTT indicates the literacy, digital literacy (D. literacy), learning to learn and cooperate learning (L2CL), education for sustainable development (E4SD), education for entrepreneurship, creativity and innovation (E4EINO), and education for diversity (E4DIV). For school climate, five items under the title of promoting confidence and self-esteem in learners (PCSE), appropriate resources to support learners (AR2SL), resources are fairly distributed among staff (RFDAS), provide learners with effective personal and career guidance (PLEPCG), and individual educational programs (IEPS). While the factor of quality of education (QOFEDU) has considered nine items under the title of support to student learning (STOSTUL), support to students through counselling service (STOSTUCS), support to teaching and learning environment (STLE), support to organization management programs (STORG), teaching awards for good teachers (TAFGT), funds to promote motivational teachers (FTOPMT), professional development for pedagogy design (PDESIGN), program monitoring and implementation (PMIMP), continuing education for faculty (CEFF). Besides, error terms are also presented in figure five ranging from e1-e27. Correlational association between educational learning and leadership management, learning and teaching, and school climate is also developed through double headed arrow.

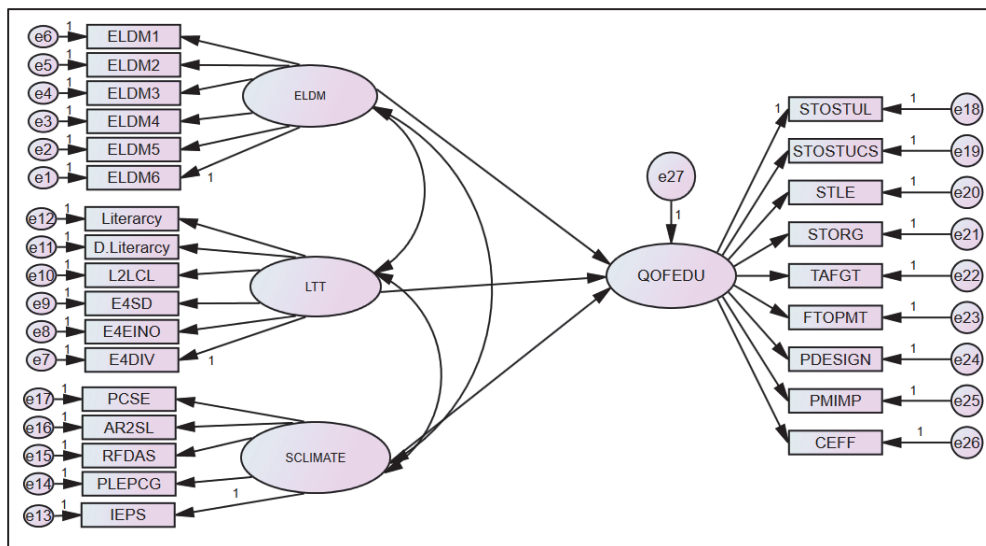


Fig. 5. Structural Equation Model of the Study

Table 7 presents the regression findings for the structural model of the study. It is found that overall impact of educational learning and leadership management (ELDM) is .127 for quality of teaching with standard error of .020. It means that more quality of education is observed through educational learning and leadership development. Increasing level of ELDM causing a positive influence on quality of education. This impact is found to be positively significant at 1 percent chance of error as critical value is 6.350 above the threshold point of 1.96. Through overall impact of learning and teaching (LTT), coefficient is .344 which implies the fact that it has positive influence on quality of education. Increasing the opportunity of learning and teaching will cause a direct impact of quality of education. The value of standard error for the coefficient of LTT is .063, providing a critical ratio of 5.462, significant at 1 percent. At third, the impact of school climate on quality of education is 1.237 with standard error of .304. It means that more quality of education is observed thorough focusing and provision of various facilities through overall school climate. This impact is significant at 1 percent. Overall findings indicate the fact that all three explanatory variables have their significant and positive influence on quality of education, defending the research hypothesis that there is a significant impact of educational learning and leadership management, learning teaching, and school climate on overall quality of education. Individual effect of each item of explanatory variable is also presented under Table 7. These findings are observed as un-standardized with the separate value of standard error from the coefficients. Regression finding known as standardized coefficients are presented under Table 8. The significance benefit for standardized regression weight is the adjustment of standard error in the value of coefficient, proving more robust findings.

Table 7
Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
OOFEDU	←	ELDM	.127	.020	6.350	***	par 25
QOFEDU	←	LTT	.344	.063	5.462	***	par 26
QOFEDU	←	SCLIMATE	1.237	.304	4.365	***	par 27
ELDM6	←	ELDM	1.000				
ELDM5	←	ELDM	1.277	.205	6.219	***	par 1
ELDM4	←	ELDM	1.400	.220	6.349	***	par 2
ELDM3	←	ELDM	1.275	.209	6.114	***	par 3
ELDM2	←	ELDM	.838	.185	4.528	***	par 4
ELDM1	←	ELDM	.534	.142	3.768	***	par 5
E4DIV	←	LTT	1.000				
E4EINO	←	LTT	1.003	.068	14.727	***	par 6
E4SD	←	LTT	.194	.100	1.949	.051	par 7
L2LCL	←	LTT	.169	.099	1.713	.087	par 8
D.Literarcy	←	LTT	.269	.098	2.758	.006	par 9
Literarcy	←	LTT	.203	.089	2.290	.022	par 10
IEPS	←	SCLIMATE	1.000				
PLEPCG	←	SCLIMATE	.748	.091	8.238	***	par 11
RFDAS	←	SCLIMATE	.967	.081	11.933	***	par 12
AR2SL	←	SCLIMATE	.981	.077	12.764	***	par 13
PCSE	←	SCLIMATE	1.131	.088	12.867	***	par 14
STOSTUL	←	QOFEDU	1.000				
STOSTUCS	←	QOFEDU	1.109	.098	11.364	***	par 18
STLE	←	QOFEDU	1.065	.095	11.263	***	par 19
STORG	←	QOFEDU	1.016	.087	11.695	***	par 20
TAFGT	←	QOFEDU	.907	.088	10.254	***	par 21
FTOPMT	←	QOFEDU	.945	.087	10.855	***	par 22
PDESIGN	←	QOFEDU	.807	.098	8.213	***	par 23
PMIMP	←	QOFEDU	.602	.091	6.642	***	par 24
CEFF	←	QOFEDU	.628	.100	6.256	***	par 28

Fig. 6 presents the output of structural model, presenting the value of standardized coefficients, correlation between the variables and individual contribution of each items of explanatory and outcome factor. Value of correlation between ELDM and LTT is .39 indicating low and positive association between the two variables. While association between LTT and SCLIMATE is .96, indicating higher correlation between the two variables. For ELDM and SCLIMATE, correlation coefficient is .23 indicating low level of association.

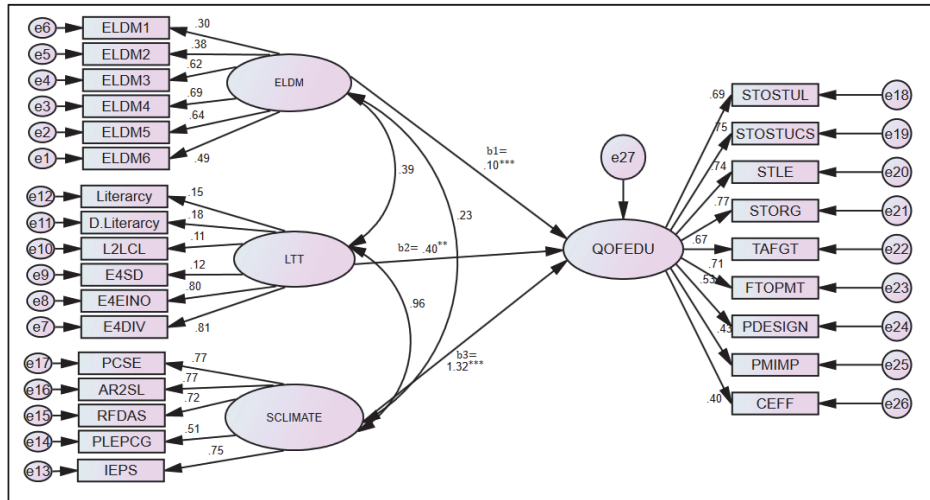


Fig. 6. Output Path Diagram

Table 8
Standardized Regression Weights: (Group number 1 - Default model)

		Estimate			Estimate		
QOFEDU	←	ELDM	.105	IEPS	←	SCLIMATE	.748
QOFEDU	←	LTT	.402	PLEPCG	←	SCLIMATE	.510
QOFEDU	←	SCLIMATE	1.323	RFDAS	←	SCLIMATE	.720
ELDM6	←	ELDM	.488	AR2SL	←	SCLIMATE	.765
ELDM5	←	ELDM	.645	PCSE	←	SCLIMATE	.771
ELDM4	←	ELDM	.685	STOSTUL	←	QOFEDU	.690
ELDM3	←	ELDM	.619	STOSTUCS	←	QOFEDU	.751
ELDM2	←	ELDM	.375	STLE	←	QOFEDU	.743
ELDM1	←	ELDM	.296	STORG	←	QOFEDU	.774
E4DIV	←	LTT	.813	TAFGT	←	QOFEDU	.672
E4EINO	←	LTT	.805	FTOPMT	←	QOFEDU	.714
E4SD	←	LTT	.125	PDESIGN	←	QOFEDU	.533
L2LCL	←	LTT	.110	PMIMP	←	QOFEDU	.428
D.Literacy	←	LTT	.176	CEFF	←	QOFEDU	.403
Literacy	←	LTT	.146				

5. Conclusion and Managerial Implications

In this study, we have found that total quality management is strategic and focuses on customer’s or client’s needs. In quality management, there are constant innovation, program changing, the emphasizing on certain programs, manager’s quality, responsibility, and freedom to creativity in work context, and also clarity of objective. Total quality management is closely related to cultural change. It refers to attitude change and work method. There are two important cases in this change; First, necessity for staff inside and outside of work environment; Second, work attitude that is supported by educational background and cultural environment to achieve work success. A qualified product starts from understanding qualified philosophy which is applied in total quality management. In educational context, we need to know that educational institution is basically associated with service industry. Through satisfied service to customer, it can add benefit and advantage in various forms. Besides, it needs to be understood that

educational institution product is education service. Its quality standard is appropriateness of its product characteristics with customer's needs. So, to get qualified product, system and process must get the main attention. In addition, this study has intended to examine the impact of educational learning and leadership management, learning teaching and school climate for quality of education in Indonesia. Findings through structural equation modelling indicates the fact that all three explanatory variables were significantly associated with the quality of education in Indonesia. Both country officials and decision makers in the field of education can significantly use these findings for decision making. However, there are some limitations. First, the study has been conducted in one region of Indonesia, having specific managerial and practical implication. Second sample size is not good enough for more generalization of findings.

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