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The influence of management innovation, school ethos and community engagement on school quality

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Abstract: This research aims to prove the direct and indirect influence of management innovation, school ethos, and community engagement on school quality. The Equation Modeling (SEM) model test analysis technique was used. Research results: 1) Strengthens Scheerens' organizational theory that school organizations can show four indicators, declared as a school with a good level of school quality model. 2) The level of achievement of one of the focuses or paths of school quality is at the level of learning in schools and classes that are oriented towards student achievement. 3) Based on the findings and the novelty of the research results, the achievement of school quality on the path of achievement and success of students is influenced and determined by management innovation, school ethos, and community involvement directly, with management innovation being the key factor directly in the non-formal education path, specifically in the type of CLC education in East Java. These factors contribute directly to student achievement and success through strengthening achievement orientation, consistency, and change management in the context of non-formal education. CLC managers need to strengthen management innovation, school ethos, and community involvement to improve the quality of educational services and student achievement.

Keywords: *CLC, Community engagement, Management innovation, School ethos, School quality.*

1. Introduction

Education is a shared responsibility between the family, government, and society, held at the level of formal, non-formal, and informal education units. The government organizes formal education levels ranging from elementary to tertiary level. Formal education has been running according to the provisions, so the government only increases the equity of its implementation. A 9-year compulsory education program was developed for the community by providing opportunities for Indonesian citizens to enter schools according to age, and the state bears the costs to achieve equity [1]. However, until now equity has yet to be performed nationally due to various obstacles such as the size of the territory, the geography of Indonesia, including the archipelago, and uneven infrastructure [2]. So the government provides a solution for people who do not have formal education opportunities by taking non-formal education that can be followed by the community in meeting their learning needs [3].

Non-formal education units include Course and Training Institutions, Early Childhood Education, and CLC (Center for Community Learning Activities) [4]. At the beginning of its establishment, CLC was a place of learning for residents of the surrounding community. CLC is part of a non-formal education unit initiated and established by the community, from the community, and for the community [5]. CLC's main activity is teaching the community through various out-of-school education program services. The establishment of CLC was inspired by the idea of community learning centers that have existed in various developed countries since around the sixties, as well as the existence of broad-based learning policies [6]. UNESCO [7] defines CLC as an organized learning place where people can learn.

The quality of CLC institutions is a form of change in the context of improving the quality of national education. Changes in the quality of CLC will impact organizational changes and the quality of

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education because the nation's progress can be seen through the quality of existing education. Improving the quality of education is a natural step in improving the nation's future [8]. A good quality CLC aims for educational activities focused on learning to run well and realize national education's goals [9]. So, the primary basis of education is learning activities that reflect the school's quality, especially CLC institutions [10]. According to Schleicher [11] the 2024 report of The Program for International Student Assessment (PISA), which measures the quality of education through science, reading skills, and mathematics, shows that China achieved the best education scores. China has the best reading, math, and science scores. PISA results in 2024 show that the best education system is dominated by the Asian continent, which includes China, Singapore, and Macau. Meanwhile, outside the Asian continent, several countries with the best education are in the top ten groups: Estonia, Canada, the United Kingdom, and Australia.

The Organization for Economic Cooperation and Development, or OECD for short, has also released data on the quality of Indonesian education worldwide. Of the 79 countries in the world that took part in the PISA event, Indonesia was ranked 74th out of 79 in the field of reading, ranked 77th out of 79 in the field of mathematics, and ranked 71st out of 79 in the field of science [11]. The results of three-year research conducted by the OECD through the PISA event show that Indonesia has improved in terms of math and science skills. Meanwhile, in terms of reading ability, Indonesia has yet to progress. According to the OECD, the improvement of Indonesia's education must continue to be improved through improving the quality of education because Indonesia's score achievement is still below the average of countries participating in the OECD. If Indonesia's achievements in education continue to be improved, then Indonesia in 2030 can have the quality of education on par with the average OECD country [11].

The achievement of the level of education in Indonesia can be seen in quantity through the APM (pure enrollment rate), GER (coarse enrollment rate), and DO (dropout) rate. In 2024, at the [12] 12 attended school. In 2019 at the junior high school level, the enrollment rate was not far from 100 percent, namely 74.52%. Based on this reality, it can be seen that the government implementing the law regarding 9-year compulsory education is still not optimal [1]. According to data from the Ministry of Education and Culture for 2024/2025 regarding the description of schools in education regulations that emphasize education starting from elementary school to junior high school as follows, it is known that there is a decrease in achievement at the junior high school level compared to elementary school. The number of students at the elementary school level is 25,486,506, twice that of junior high school, which is 10,125,724. From the number of students present, it can be seen that only 0.1% of elementary school students dropped out of school, namely 32,127 students and 1% or 370,116 students who experienced repetition. Meanwhile, at the junior high school level, data was obtained that 0.5% or 32,127 students dropped out of school, and as many as 9% or 28,470 students experienced repetition [12].

Another indicator that shows that the quality of education in Indonesia could be more optimal, namely based on CLC accreditation in Indonesia, is that the condition of CLC still needs to improve, which requires improvement. Accreditation is a way to assess a school's quality or level of progress based on the eight educational standards adopted by the accreditation body. In 2024, only 70 CLC institutions have succeeded in obtaining accreditation, with 15 institutions having an A rating, 44 institutions having a B rating, and 11 institutions having a C rating [12]. Rating B shows the most significant number, while ratings A and C are balanced. This shows that the condition of the CLC Institution is still in the development stage—application of the 8 National Education Standards as a measure of accreditation assessment of institutional performance. Social institutions generally have very diverse variations. If you find 100 CLC institutions, there will be 100 characters and variations.

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Table 1.
The number of students attending Culture Courses.

No	Educational institutions	Accreditation Rating	Total
1.	CLC	A	15
2.		B	44
3.		C	11
Total			70

Source: BAN PAUD AND DIKMAS East Java Province [12].

The data above shows that most CLC institutions still do not have adequate infrastructure facilities to support the learning process (learning activities are still primarily indoor activities); second, student achievement has not been realized due to student input, while CLC resources are still limited (educator's skills) to do so. So this research is very strategic because CLC needs guidance and development related to eight national education standards and obtaining policies from the government to organize National Examinations, as well as other program funding, including in the development of future CLC programs.

In reality, CLC is a non-profit organization, and in a performance-oriented environment, there is a demand to develop a professional and influential institution. School quality focuses on student achievement and the school's ability to make changes [13]. CLC in school quality is said to support teaching and learning, enable the professionalism of learning educators, and provide the means to implement strategic actions to continuously improve CLC [14]. The results of theoretical research show that several factors influence the quality of schools. A theoretical analysis is carried out using a Pareto chart to focus on these factors, which will be selected as research variables. Pareto diagrams organize problems or errors to help focus on solving problems. The results of the analysis of the Pareto diagram found the factors that influence school quality as follows, indicating that the variable of the effectiveness of learning time influences it. Time effectiveness is the most studied variable, which is 20% of other factors, followed by management innovation at 16%, school climate at 15%, staff performance at 13%, monitoring and evaluation at 13%, community engagement at 8%, and school ethos 1%

The results of theoretical research on school quality are also supported by preliminary research conducted on six CLCs in East Java. It was found that the six CLCs in the work ethic had not been carried out optimally. Five of the six CLCs are still focused on the work ethic of educators alone, without involving students. Only one CLC implements a work ethic with a complex educational model, namely implementing education training programs and community empowerment. Research results also show that three out of six management innovations are carried out through partnerships with other institutions to develop CLC, such as course institutions, other CLC institutions, cooperative institutions, printing institutions, and others. Meanwhile, one in six schools is developing management innovation through technology, such as creating electronic performance reporting and electronic attendance systems. Meanwhile, research also found that three out of six CLC had yet to implement management innovations. It was evident that the CLCs stated that they still depended on the performance of educators personally.

In this study, several factors in school quality, including management innovation, work ethic, and community engagement, are seen as a life system that is integrated with one another and impacts the school's quality. School quality will contribute to the success of students [15]. This school quality research assisted CLC in carrying out the improvement process through effective school improvement methods. The ultimate goal of school quality is to increase student achievement [16]. Thus, research on school quality is a topic that has a significant impact on the progress of the nation's future and is a topic that must be studied. Research on school quality is related to management innovation, school ethos, and community engagement as an integrated system to develop CLC institutions in East Java. The link between school quality and management innovation, school ethos, and community engagement at CLC requires the involvement of managers throughout East Java as respondents. The selection of managers as research respondents is because managers play a central role in the process of improving institutions

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that can perceive the role of management innovation [17] school ethos [18] and community engagement [19].

2. Methods

The research design uses a quantitative approach with a structured equation model (SEM) or structural equation modeling. The reasons for choosing SEM, namely 1) Technically speaking, there are three results simultaneously, and 2) Complete modeling consists of a measurement model and a structural model or causal model. 3) As an analysis, it is used as a tool to analyze the relationship between variables simultaneously, both directly and indirectly, on independent variables, intervening (mediation), and multiple dependent variables [20]. The research location was in the CLC of East Java Province, and the time the research was conducted was from January to August 2024. The population in this research was managers in East Java.

2.1. Sample

The research sample was selected by managers in each district in East Java using probability sampling techniques, especially stratified cluster random sampling. According to Das, et al. [21] stratified cluster random sampling is a sampling process that combines the characteristics of stratified random sampling and simple cluster sampling.

The sampling procedure begins with determining the area or cluster (group) to be studied; in this case, the cluster in question is CLC in East Java, based on the work area of the Regional Government and Development Coordinating Agency for East Java Province according to Regional Regulation No. 16 of 2016.

Based on the East Java Regional Regulation, it is divided into five regions with the following details;

Table 2.
Division of Work Areas Based on the East Java Regional Regulation.

No	Regions	City of East Java Indonesia		
1	Region 1	Madiun	Ponorogo	Pacitan
		Magetan	Trenggalek	Kediri
		Ngawi	Tulunganggung	Kota Madiun
		Kota Kediri		
2	Region 2	Bojonegoro	Jombang	Nganjuk
		Lamongan	Mojokerto	Kota Mojokerto
		Tuban	Gresik	
3	Region 3	Malang	Blitar	Kota Batu
		Pasuruan	Kota Blitar	Kota Pasuruan
		Sidoarjo	Kota Malang	Kota Surabaya
4	Region 4	Sampang	Pamekasan	Sumenep
		Bangkalan		
5	Region 5	Jember	Probolinggo	Bondowoso
		Lumajang	Situbondo	Kota Probolinggo
		Banyuwangi		

From the five working areas, as shown in table 2, CLC will be selected from each representative area on a random basis to meet a total sample of 400 managers, then three districts will be taken from each region as follows;

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Table 3.
Regional division of respondents.

No	Kluster	Representative city	Total CLC	Total manager
1	Region 1	Tulungagung	32	32
		Magetan	10	10
		Kediri	45	45
2	Region 2	Jombang	29	29
		Lamongan	36	36
		Mojokerto	16	16
3	Region 3	Malang	61	61
		Sidoarjo	13	13
		Surabaya	36	36
4	Region 4	Sampang	30	30
		Bangkalan	23	23
		Pamekasan	13	13
5	Region 5	Jember	27	27
		Lumajang	13	13
		Probolinggo	16	16
	Total		400	400

Each selected district/city area was taken by 1 manager so that the number of research samples collected was 400 managers in the CLC Region in East Java.

2.2. Data Collection Techniques and Instruments

This study examines a theoretical model that uses a structural equation model from a theoretical perspective. There are two stages in building a theoretical model: a measurement model. The measurement model is a confirmatory factor analysis that specifies the relationship between the observed variables that underlies the latent. The measurement model contains validity measurements. Second, the structural model specifies the relationship between latent variables and the model created by the researcher. The type of scale used is a Likert scale. The assessment or scoring of statements is given a value of 1 to 5, including Rarely (HTP), Rarely (J), Sometimes (K), Often (S), and Almost Always (HS).

2.3. Analysis Techniques

Data analysis techniques were used to test hypotheses using structural equation modeling (SEM) techniques with latent variables with the help of the AMOS program. The structural equation model technique is a statistical methodology that takes a confirmatory approach (testing hypotheses) to analyze a theory or theoretical model that relates several variables. The theory describes a causal process resulting from several variables; in other words, the structural modeling equation (SEM) is used to describe the relationship between observed variables [22].

3. Results and Discussion

This research was conducted in 400 CLCs in East Java with 400 institutional management respondents. The study's results describe the demographic descriptions of the research respondents, which vary. The first variation in the demographics of research subjects is gender, namely male and female. Male respondents were 224 people or 56.00%, while female respondents were 176 people or 44.00%. So, in this study, the number of male respondents was 48 people or 8.00% more than the number of female respondents. In this study, the minimum age of research subjects is 23 years. At the same time, the maximum age of research respondents is 60 years. Meanwhile, the average age of the research respondents was around 40 years.

Table 4.
Description of Research Data.

	Minimum Score		Maximum Score		Average Score		Std Score	
Variabel	**Hipotetik**	**Empirik**	**Hipotetik**	**Empirik**	**Hipotetik**	**Empirik**	**Hipotetik**	**Empirik**
School Quality	35	85	175	175	105	144.448	23.333	17.256
Management Innovation	15	30	75	75	45	59.34	10	8.717
School Ethos	11	15	65	65	32.5	52.805	10.833	5.487
Community Engagement	17	19	68	68	42.5	50.213	8.5	8.965

Another demographic variant owned by the research respondents is the last education of the research respondents. Respondents in the study with the last education at the undergraduate level (S-1) were 327 people or 81.00%. Meanwhile, the remaining 72 people or 18.00%, had the last educational background at the master's level (S-2), and 1 person or 1.00% of the respondents, did not know their last educational level. Thus, the number of respondents at the undergraduate level was more than 255 people or 63.00% compared to the respondents with the last education at the master's level.

The description of the research data is used to see an overview of the conditions of the research subjects based on the research variables. Description of data on each research variable which includes school quality, management innovation, school ethos, and community engagement, can be seen in the following table.

4. Results of Hypothesis

Normality and linearity tests were carried out before the data were analyzed further. The following are the results of the normality and linearity tests obtained.

4.1. Data Normality Test

Based on the results of processing the normality test data using SPSS, the following data is obtained

Table 5.
Research Variable Normality Test Results.

School	**Quality**	**Management Innovation**	**School Ethos**	**Community Engagement**
N	400	400	400	400
Normal Average	206.619	59.340	52.805	50.212
Parameter[a] Standard Deviation	82.397	8.717	5.487	8.965
Asymp. Sig. (2 tailed)	0.05	0.074	0.097	0.083

Based on the normality test results using SPSS software assistance as Table 4, data were obtained from respondents (N) in the study, totaling 400 people. The school quality variable has an average value (mean) of 206,619 with a standard deviation (std. deviation) of 82,397. At the same time, the significance value (significant 2-tailed) is 0.058 ($\alpha > 0.05$). So, the school quality variable has typically distributed data.

The first independent variable of management innovation gets an average value (mean) of 59,340, a standard deviation (std. deviation) of 8,717 with a significant 2-tailed value of 0.074 ($\alpha > 0.05$). Thus, the management innovation variable has typically distributed data. The independent variables of the two school ethos obtained an average value (mean) of 52,805, a standard deviation (std. deviation) of 5,487 with a significant 2-tailed value of 0.097 ($\alpha > 0.05$). That is, the school ethos variable has typically distributed data. The independent variable, community engagement, gets an average value (mean) of 50,212 with a standard deviation (std. deviation) of 8,965. At the same time, the significance value (significant 2-tailed) is 0.083 ($\alpha > 0.05$). Thus, the community engagement variable has typically distributed data.

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4.2. Linearity Test

The following data is obtained based on the results of processing the linearity test data using SPSS.

Table 6.
Summary of Linearity Test.

Dependent Variable	Independent Variable	Significance	Information
School Quality	Management Innovation	0.367	Linier
	School Ethos	0.849	Linier
	Community Engagement	0.450	Linier

Based on Table 5 summary of the linearity test, the school quality variable data has a data linearity value with management innovation, school ethos, and community engagement. In the school quality variable with management innovation, the deviation value data from linearity is 0.367 ($\alpha > 0.05$). That is, the data obtained from the field is linear. School quality and ethos variables have a deviation value from linearity of 0.849 ($\alpha > 0.05$). Thus, data from the field regarding school quality and ethos have linear data. The school quality variable with community engagement proves that the deviation value of linearity is 0.450 ($\alpha > 0.05$). Thus, data from the field regarding school quality and ethos have linear data.

Table 7.
The amount of total, direct, and indirect influence on the model.

Total	Direct	Indirect	Estimation	S.E.	Est./S.E.	*p*
IM →SI			0.78	0.12	4.35	0.00
	IM → SI		0.78	0.12	4.19	0.00
		IM → ES → SI	0.64	0.19	4.10	0.04
		IM → CE→ SI	0.56	0.17	4.35	0.01
CE →SI			0.67	0.14	4.41	0.00
	CE → SI		0.81	0.14	4.29	0.00
		CE → ES→ SI	0.58	0.23	3.88	0.00
	ES → SI		0.60	0.14	4.33	0.02
	IM→ ES		0.89	0.17	3.98	0.01
	IM→ CE		0.85	0.15	4.23	0.02

Table 7 is the result of the analysis, which shows that:

Proven direct effect hypothesis

1) Management Innovation (IM) is proven to have a significant direct effect on School Quality (SI) with an estimated value of 0.78 or 78% and a significance of 0.00 less than ($p < 0.05$).
2) Community Engagement (CE) is proven to have a significant direct effect on School Quality (SI) with an estimated value of 0.81 or 81% and a significance of 0.00 less than ($p < 0.05$)
3) School Ethos (ES) is proven to have a significant direct effect on School Quality (SI) with a significance of 0.02 less than ($p < 0.05$) and an estimated value of 0.60 or 60%
4) Management Innovation (IM) is proven to have a significant direct effect on School Ethos (ES) with a significance of 0.01 less than ($p < 0.05$) and an estimated value of 0.89 or 89%.
5) Management Innovation (IM) is proven to have a significant direct effect on Community Engagement (CE) with a significance of 0.02 less than ($p < 0.05$) and an estimated value of 0.85 or 85%.

The proven indirect effect hypothesis

1) Management Innovation (IM) is proven to have a significant indirect effect on School Quality (SI) through School Ethos (ES) with a significance of 0.04 less than ($p < 0.05$) and an estimated value of 0.64 or 64%.

2) Management Innovation (IM) is proven to have a significant indirect effect on School Quality (SI) through Community Engagement (CE) with a significance of 0.00 less than ($p < 0.05$) and an estimated value of 0.56 or 56%.
3) Community Engagement (CE) is proven to have a significant indirect effect on School Quality (SI) through School Ethos (ES) with a significance of 0.00 less than ($p < 0.05$) and an estimated value of 0.58 or 58%

5. Discussion

5.1. Management Innovation (IM) is Proven to have a Significant Direct Effect on School Quality (SI)

Management innovation can be supported by good teamwork. At the level of the education system where teaching staff and students are rewarded according to individual activity, teamwork, and involvement in educational projects. Under these conditions, professional motivation and job satisfaction will increase, and a school culture that favors innovation will be built [23]. Compared to other types of innovation, management innovation has a unique ability to carry out changes in a radically positive direction and last for a long time [24]. Innovation management implies holding and practicing managerial skills, determination, and courage in taking responsibility for implementing changes that trigger progress and performance.

The findings and theoretical analysis confirm that CLC improvements should consider management changes. Because there is a change in management (management innovation) through productive solutions and cross-sectoral collaboration will facilitate achievement, impacting school improvement. School improvement leads to open school development goals, access and network improvement, and teaching quality.

5.2. Community Engagement (CE) is Proven To Have A Direct Influence On School Quality (SI)

This shows the inconsistency of the results of the high direct impact of community involvement with increased student outcomes due to the focus of community involvement on socioeconomic class [25]. Strong community engagement is essential for developing social capital, especially in poor cities and rural communities [26]. This study uses CLC as part of a middle-class urban community school, showing that community engagement impacts student success. Based on the literature review, these findings can be analyzed using a social capital theoretical framework regarding orientation in driving community engagement, a framework for connecting CLC relationships with the community Putnam [27]. DeMatthews [28] states that social capital refers to organizational images such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefit.

Community engagement has been directly proven to affect school quality and can be analyzed using the connection framework of community engagement and CLC relationships, which refer to the framework [29]. The framework in question includes the notion of Bonding and Bridging to analyze the connection between CLC and community involvement. This framework is the social capital theory, namely bonding, which refers to bonds between individuals with the same identity and background. An example of bonding social capital comes from the work of DeMatthews [28] which found a mother in a public housing unit utilizing a network of family and friends to meet her needs. Meanwhile, bridging social capital is related to cross-sectoral relationships where members of one group connect with members of another group to seek access to support or obtain information.

According to Neves and Fonseca [30] understanding CLC connections and community involvement are categorized into four connection levels: the first level is bonding, while levels 2 to 4 are bridging. Based on the social capital theory, connections are built between the community and CLC members at the bridging level. Community involvement for CLC is already at the level of bridging, which is oriented towards good reciprocal relations. If we look back at community engagement dimensions, the significant loading factor is the first aspect or dimension, namely the mission and culture that support community engagement. Within this dimension are indications of how community engagement becomes [31] (1) provisions in learning, research, and service, (2) becomes tradition and

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spirit, and (3) self-awareness and collective action. It has been sustainable (continuous regularly, and there are efforts to improve), consistent, creative, and innovative in what has happened at CLC.

Other factors Community engagement directly impacts student achievement directly at CLC, and namely first; there is a direct influence that can work through other mediating factors. For example, suppose CLC fosters positive relationships with the community, such as involving them in planning CLC activities and regular discussions about CLC issues. In that case, it will have a positive impact on student achievement. Second, trust because there is success in building partnerships in trust between the organizations involved and prospects for future collaboration [32] while social trust is a critical foundation in building partnership relationships in CLC development [33].

Based on theoretical analysis and research results confirms community involvement in Indonesia in CLC. Connections that are built are still bridging connections, namely bridging connections. The bridging connection shows the involvement of a partnership, two directions, mutual Trust, and a joint commitment to building CLC to achieve student achievement to improve CLC

5.3. School Ethos (ES) is Proven and has a Significant Direct Effect on School Quality (SI)

The results align with previous research on school quality, which emphasizes the importance of the role of culture, ethos, climate or spirit, and atmosphere of the school [34]. Likewise, a healthy learning environment impacts student achievement as the goal of school quality [35]. Also found a positive relationship between school climate and student achievement [36]. This proves that a school ethos or atmosphere needs to be present in CLC) because CLCs with a hostile atmosphere will produce lousy behavior compared to a positive school ethos, while a good school ethos is related to development. Good managers so that the school ethos impacts school outcomes [37]. The absence of an impact of ethos on student achievement is related to the meaning of the concept of ethos, which tends to differ. Ethos is what is felt and not what is thought [38].

Another explanation regarding the school ethos on the quality of schools in CLC is that there is no entrenched school ethos in CLC, and the school ethos still needs to be built because ethos can produce culture in CLC [39]. Second, the school ethos becomes the best supplement for school quality when it is intertwined in a collegial culture [40] which reflects first, a commitment to a shared vision for CLC, provides educators with clear goals and directions and has the potential to have strong morals. Second, coordinating policies to create a consistent environment and expectations for educators and students; Third, methods for enhancing the continuity and progress of the curriculum for students so that unplanned repetition or omissions are avoided, and educators build on the foundations set by colleagues in related subjects or previous classes; the four practices that support shared classroom observation and discussion of teaching and learning, enable sharing of problems and good practices, experience with new ideas, and encouragement of reflection; Fifth, a way to reconcile the demands of professional development with the development of CLC.

The findings show that the school ethos is successfully implemented through management policies [41]. Managers will encourage and control the values that drive student success to be implemented by all stakeholders [42]. Ideally, the school ethos occurs simultaneously and collectively, reflected in a collegial culture. Collegial culture reflects a shared commitment to achieving the vision and goals of building a learning spirit and atmosphere so that a shared commitment makes it easier to make school improvements to achieve student achievement.

5.4. Management Innovation (IM) is Proven and Has a Significant Direct Positive Influence on School Ethos (ES)

Management innovation has a direct effect on the school's ethos. The results of this study confirm that management innovation can move together with managers as the organizational performance framework explains the antecedents of management innovation, and these antecedents or factors are managers who are an essential key to management innovation [43]. So that management innovation requires a driving force in making educational changes through the school quality pathway.

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The results of management innovation on the school ethos show that innovation produces change, which can bring individual discomfort, resulting in a loss of enthusiasm to create a directed environment [44]. Theoretically, the risk status theory framework can explain how managers convey feelings about the proposed innovation [45] and help explain differences between educator beliefs and other educators in schools regarding innovation practices.

Based on this theory, managers accept to make changes (innovations) because there are two factors, namely, first, related to the status of educators in the organization. Second, there is an initial risk with uncertain benefits. Recognition of innovation carries a risk because there are costs associated with implementing new practices with the status of educators in schools. As educators face a wave of new and ongoing programs and practices, it can be costly to adopt each new practice when only a few practices can impact and benefit educator teaching. Furthermore, because of differences in the status of educators in schools, some educators may face more risks than others about innovation. For example, if there is a change in the curriculum at CLC, if, according to educators, it will not contribute, it is possible that participation in innovation will be low, impacting students' success. The study's results [46] found that the self-termination of educators in the innovation development process contributes to greater ownership and acceptance of organizational change. However, with the adoption of more ambitious practices, the possibility of having more significant opportunities to improve teaching and student outcomes positive.

Based on this, these findings indicate that the existence of innovation will provide a positive perception because it impacts changing the school's ethos. The presence of innovation is perceived as bringing about the changes desired by CLC, which will produce short- or long-term benefits. Ideally, in carrying out management innovation by managers, clarity of change and recognition of change (e.g., the existence of new solutions such as the use of technology and model changes) will be a challenge for cross-CLC competition and build a positive image or branding for the achievements of the CLC changes that have been made.

5.5. Management Innovation (IM) is Proven to have a Significant Direct Influence on Community Engagement (CE)

These results support previous research that Management Innovation (IM) is proven to have a significant direct effect on Community Engagement (CE). The findings obtained by Wrigley found that the role of the community can contribute to increasing student achievement, mainly if it is supported by management innovation and in line with Earl, et al. [47] stated that the success of the school quality program in several middle schools in the Canadian province of Manitoba was due to supportive community engagement from outside the school. The relationship between the school and the community outside the school arises from conditioning the school climate by giving pressure and support to people willing to change what they do without strict arrangements from stakeholders.

According to Rhodes, et al. [48] community engagement is critical. Educators outside the CLC still need learning and experience to improve their abilities. So that outside the CLC, resources are still needed to support these needs. At the same time, learning barriers, academic achievement, and success in CLC tend to be addressed in various ways due to various limitations. One of the consequences is that students who come to CLC need to be prepared and able to learn. So, to get maximum student results, community engagement is needed. The acquisition of high student outcomes can realize school quality. Lowe, et al. [49] statement that community engagement positively impacts student outcomes and school quality.

In Indonesia, CLC provides a forum for community engagement to exchange ideas and jointly formulate policies or rules to improve student outcomes [4]. This fact shows that the link between community engagement and school quality will be formed, considering there are management innovations that support community engagement. Based on the explanation above, these findings confirm that community engagement at CLC can create management innovation. The community

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engagement built is partner involvement, mutual giving, and collaborating engagement so that the collaboration between CLC and the community (society) results in a positive learning atmosphere.

5.6. Management Innovation (IM) is Proven to have a Significant Indirect Effect on School Quality (SI) through School Ethos (ES)

Management innovation is significant and indirectly relates to the school's ethos. The results of this study are indirect, which confirms that management innovation cannot move on its own without a school ethos, especially managers, as the organizational performance framework notes that there are only a few studies that explain the antecedents of management innovation and these antecedents or factors are management behavior which is an essential key to management innovation. So that management innovation requires a driving force in making educational changes through the school quality pathway.

5.7. Management Innovation (IM) is Proven to have a Significant Indirect Effect on School Quality (SI) through Community Engagement (CE)

In essence, the management innovations that CLC has implemented have produced solutions to overcome problems. This is illustrated in practice at CLC, especially educators who have used innovation with skills education, such as motorcycle repair shops, modern sewing tools, and so on, as a form of learning innovation in life skills. Found in the use of media in the current era consistently. Many practices are found, and electronic media is used optimally especially skill tools.

Management innovation is proven to have a significant indirect effect on school quality through community engagement (CE). These results support previous research that community engagement has been shown to have a significant indirect effect on school quality through management innovation. Because the management innovation itself to the quality of the school is significant. Schools provide a forum for community engagement to exchange ideas and jointly formulate policies or rules to improve student outcomes [50].

5.8. Community Engagement (CE) is Proven to have a Significant Indirect Effect on School Quality (SI) through School Ethos (ES)

Instructional leadership through school ethos has no significant and negative relationship to school quality because school ethos itself is also not significant to school quality and has a negative relationship. This study's results support previous studies proving that there is no significant effect of school ethos on student success, which is the goal of school quality. Several studies have shown that not all school ethos will affect student success. Students who only have a favorable view of the school's ethos may need to be more to trigger their achievement, because a good school ethos is related to the development of good teachers, so the school ethos has an impact on school outcomes [51].

5.9. Suggestions

The theoretical perspective or theoretical position of the research results in the theoretical repertoire studied in this dissertation research can be presented as follows: 1) The effect of management innovation, school ethos, and community engagement on school quality at CLC in East Java schools strengthens or strengthens Scheerens' organizational theory that school organizations can show four indicators, namely achievement orientation, leadership, consistency, and an orderly atmosphere, declared as a school with a good level of school quality model. 2) The level of achievement of school improvement when school quality factors meet the indicators of creating school quality, including management innovation factors, school ethos, and community engagement. One of the focuses or paths of school quality is at the level of learning in schools and classes that are oriented towards student achievement. This focus is supported by change management-oriented capacity development, strengthening the specific context related to the program. Based on this, in line with the latent variables that have been selected, achievement orientation is represented by community engagement variables

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and management innovation, and consistency is represented on the manifest/observed variables there are management innovations, community engagement, school ethos, and orderly atmosphere represented by ethos variables school. 3) Based on the findings and the novelty of research results, the achievement of school quality on the path of achievement and success of students (students achievement and successful students) is influenced and determined by management innovation, school ethos, and community engagement directly and management innovation which are the key factors directly in non-formal education path, type of CLC education in East Java.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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