ISSN (Print): xxxx-xxxx ISSN (Online): xxxx-xxxx

JOURNAL OF SOCIAL SCIENCES DEVELOPMENT

www.jssd.org.pk editor@jssd.org.pk

ROLE OF INFRASTRUCTURE CO-CURRICULAR ACTIVITIES & PROFESSIONAL TRAINING ON UNIVERSITY DEVELOPMENT: MEDIATING ROLE OF TEACHING METHODS ADMINISTRATION AND COMMUNITY

Irfan Ullah Khan

School of Management and Economics, Beijing Institute of Technology, Beijing, CHINA

KEYWORDS

Infrastructure, Co-Curricular Activities, Professional Qualification & Trainings, University Development, Role Of Administration, Teaching Methods, Role Of Community

ABSTRACT

Purpose of this paper is to explore the role of infrastructure, co-curricular activities, professional qualification and training and linkage with university development. By Using role of teaching method, role of administration and role of community as mediator in this study. a structured questionnaire has been prepared strictly in line with the extracted variables and guidelines for questionnaire construction. As far as this research study is concerned, primary data was collected over closed ended standard questionnaire, distributed among teaching faculty of different universities. The bivariate correlation and multiple regression were used in this study and the result shows their significant relationship between variables. In this research study we find the partial mediation between variables and founded significant result during analysis. The limitation of this study is that our population was universities of KP province and collected data from the public and private universities. The questionnaire distributed among the teaching faculty was 1400 and 1000 collected and got the response from respondents that were used for analysis in reaching conclusion.

Corresponding Author Irfan Ullah Khan

Email: irfanullahkhan9214@gmail.com

DOI https://doi.org/10.53664/JSSD/01-01-2022-06-58-74

INTRODUCTION

Living standard depends on the infrastructure because infrastructure is backbone for enhancing education qualification and living style of individuals. The infrastructure can develop the living standard of the papulation and peoples can access batter resources (Barron et al. 2004; Kim 2006; Shah 1992). But these projects can interrupt the live off million people some time. These projects create some time problem to the people because of their poor level of concentration and lack of in consideration of local actors (UNEP, 2004). These projects initiated in rural settings, where native peoples stand to lose their resource if the projects change the living status and support to peoples. For these projects the need for strictly check and balance to complete the whole project on their determine time and duration. The recompense of local population will only be possible if they prove

possession of damages by the project. This is understood in rural area mostly peoples share common pool resource (CPR), related with lack of social justice and recognized rights (Ostrom 1990). Also, there is a rising concern about question of good local or territorial governance as source of economic development of states and regions (Torre & Traversac 2011), this issue is also discussed in and occupy position in political and social research. in this research study we explore role of infrastructure in university development.

This is explored in previous study the infrastructure plays a vital role for development of institution and role of economy. In Hong Kong post-secondary education sector experienced rapidly growth in past decade. Mainly, in large part due to the attempt of government to improvement quantity of graduates with degree or sub-degree qualifications to meet the changing skills and knowledge-based economy and increase the numbers of Community colleges to provide the batter education facility and wide range of top-up degree program. These new colleges play a vital role especially in private education sector. These community college expended widely and number of students are increased from only 3 to 3,732 in 2001 to more than 10 and 23,300 in 2010 respectively (Hong Kong Government, 2010).According to (Kemendiknas, 2010) observation main challenge for Indonesian education is to improve human resource management in education sector and also in united nation development report which presented in 2011 that still Indonesia is in ranking 124 of 187 countries in human resource development index report. More about Indonesian education one more challenge which influence the education sector which affect directly to society ability and quality. After that government initiate to invest in the education sector and adopted a strategy to improve quality of human resource management.

The quality of education also influences the teachers and support to education sector to produce professional teachers they have well skill of life, competitor and self confidence in others teachers and peoples in professional life. These above efforts of Indonesian constitution main objective was to improve the quality of teachers continuously. These efforts ensure that the quality advancement relevance, as well accountability and good governance also influence standard of the education sectors and teachers also face the challenge at the local level national level and global level in professional life. These projects initiated in rural settings, where native peoples stand to lose their resource if the projects change the living status and support to peoples. It is vital for the Indonesian government to adopted effective and fast advance and latest technology for growth of professional development of teachers of professor because there is link between professional development and development of institution and this can also help full the learner to get professional knowledge and latest technology and face different challenge of society and need to reduce the gap between the bureaucracy and government these can change the teacher development and then achieve the batter achievements.

LITERATURE REVIEW

Infrastructure projects need to place them in a broader community framework, correcting both market and government failures. As a procedural instrument, assessors can adopt, for example, a hybrid method of natural and artefactual field experiments to cause the role of infrastructure in facilitating the complementarily of the market, state, and community mechanisms. We limited our

coverage to economic infrastructure such as telecommunications, roads, irrigation, and electricity, excluding social infrastructure such as water supply, sewage systems, hospitals, and school facilities. In broader sense such as institutional infrastructure are not discussed in the past research and the impact of infrastructure on educational development should be perused in further studies (Sawada, 2015). As professional it is compulsory for teachers to learn professional skills for achieving a good outcome for students. Its fact that low pedagogic skill creates difficulties for the teachers to sustain and students' attention toward learning process (Chapuis, 2003), to provide the different styles of learnings to participate in different intellectual and other healthy activities to develop the skills and knowledge (Kalantzis & Cope, 2003). It includes how to grow strategies for supporting and gaining attention of students and for development of university or institution, to learn competence. Teacher provides knowledge to learner if they have high thinking and intellectual skill (Murdoch, 1998). That is why pedagogic capability needs known as broader talent and skills for successful teaching and learning to develop the universities. Co-curricular activities play important role for development of institution but there is some advantage and disadvantage of co-curricular activities in the education sectors.

Infrastructure

Infrastructure is well understood and valuable factor in the eye of policy makers, because the infrastructure is a backbone for the development of any institution of state and it is fact that the if policy maker want to improve condition of state of any institution the increase the batter quality and quantity of the infrastructure and then they can get more physical capital and other objective effectively and efficiently by providing different access likewise the roads and other means of the required communications.

1. Improve education and markets for farmers' outputs and others by cutting costs,
2. Facilitate private investment,
3. Improve jobs and income levels for many) (Estache & Garsous, 2012).

Infrastructure & University Development

The past studied identified that interrelation among infrastructure and universities developments this argument that these are interdepend institution infrastructure and economics activities and they are mutually interrelated components of society and activities are entrenched with a superior environmental life support system and change at the one level of organization system can persuade a complex set of changes throughout the system. The arrival of steel-beam construction has made likely the spatial accumulation of office and housing units, and compulsory building of transport networks, parking garages, sewage systems and other infrastructure to house a high attentiveness of office workers and households. Being able to recover our knowledge of interrelationships among changes in infrastructure systems and the services they deliver is energetic for the promotion of sustainability of each module and system as a whole (Ruth, M. 2010). Infrastructure is an important factor which provide and maintain the service and enhance the economic activities and institution development as well air ports, roads and access to produce the resources and also provide market for their products.

The peoples use these resources and other means or communication to access the work recreation. Information and communication system such as storage device and telephone to help and provide easy way to convey information. The other means of resources like flood management drainage water supply and wastewater action system provide facility to agriculture. Residential consumer and industry to protect the business and hoe from flooding and guarantee treatment of wastes to minimize environmental damage and adverse human health effects. Energy systems, such as power plants, and their related delivery networks, provide energy on which the economy runs. Such as residential and commercial facilities to peoples like construct facilities to provide batter facilities the families as well business in diverse situations. In this regard, as par literature in short its argued that the economy, institution affected by infrastructure and this way reliability of infrastructure and batter infrastructure facilities can develop the batter economy and also for an institution those institutions that directly control maintenance, growth and use of infrastructure, and those that directly and indirectly place demand on the services providing by particular infrastructure systems (Ruth, 2010).

Co-Curricular Activities

Co-curricular activities play a vital role in the development of institutions, and they are activities that enhance and supplement the regular curriculum during normal university or school days. They are known as extracurricular, extra-class, non-class, university or school-life, and student activities (Tan & Pope, 2007). While there is no precise definition of co-curricular activities, they are often considered more student-centered than the regular classes. In this connection, the students take on leadership roles, the affiliations and experiences are determined by their spontaneous interests and immediate needs, and teacher supervisors often act as mentors or guides rather than instructors (Stevens, 1999).

Student Involvement Theory

This is fact that the students can get energy like physical and psychological when they are involved on activities like sports educational activities in college or university. These activities consist of others form the main objectives of these activities to create interaction and these extracurricular activities brings teachers as well students to interact with each other. These activities can help the learning process of students and build confidence amid students and teacher personal development (Astin, 1999).

Astin Involvement Theory

Astin explore the more study about curricular activities and students' developments in educational institution and develop theory of student developments (Astin, 1968, 1975, 1984, 1985, 1987; 1993; Astin, Korn & Green, 1987). Some assumption given Astin in his theory and he explore in broader sense in academic experience he produces some assumption as are following.

1. Students' involvements help the students for development of physical and mental energy.
2. Involvement occurs along a continuum.
3. Astin suggest that the student's involvements in co-curricular activities is both in nature as qualitative and quantitative.

4. Students' developments are related with the all-educational activities which is conducted by university or school if many students participate in these activities, then they can learn more from these programs.
5. The student's participation in these activities is successful then the policy and practice is successfully done with the help of students' participations (Astin, 1984: 298).

This theory shows that model of student's participation in educational activities. In this connection, time and energy is most important factor in students' participation in activities these motivate to the students to learn more effectively about the commitment and help to achieve successive way in the future endeavors.

Co-Curricular Activities & University Development

The primary objective of education should be to facilitate comprehensive growth of students. This can be achieved by integrating all relevant elements into curriculum during educational process. To accomplish this, it is crucial to effectively incorporate Co-Curricular Activities within schools and colleges. Education plays a functional role for building the capabilities and character building of individual as well different skills and living behavior to understand and face diverse challenges so therefore the become a good citizen of society. The education is a power full instrument which is mostly helpful to control he complex character and habit of different social groups. Therefore, the institution such as different educational schools, collages, and university are playing key role for building and controlling these complex habit and characters. These institutions play a significant role and provide a positive environment toward attitude of individuals and the co Co-Curricular activities play a major role for building these if there are no activities in any institution such as, debates, seminars and educational workshop so it will play a negative role on students learning and also directly affect school or university development. So, this explores that student's participation in the co-curricular activities can develop the skills and learning process of students and helpful to make social groups by adding and make his own judgments on the basis of skills and intellectuals' skills (Patil, 2014).

Professional Qualification & Training

Are past studies exploring that there is vital role of professional development in teachers learning. At generally at center of such endeavors is those Comprehension that professional development may be something like teacher learning, taking in how on learn, also transforming their information under act for the profit from claiming their people 'growth. Educator's testament proficient Taking in may be an intricate process, which obliges cognitive and enthusiastic inclusion of educators separately What's more collectively, capacity and willingness to examine where each one stands in terms of convictions and beliefs and the perusal and enactment of appropriate alternatives for improvement or change. Know this happens educational policy states or school values, percentage for which need aid additional fitting and helpful should Taking in over others. Those instruments used to trigger advancement additionally rely on those targets and necessities about educators and in addition of people. Subsequently formal structures for example, such that courses and workshops might serve some purposes, time contribution in creation about curricula, those examination from claiming appraisal information or imparting of methodologies might serve other purposes it is true

when teacher are train with relevant field it is not fact that every training helps to develop teacher skill and learning.

There will be in this way a consistent requirement on study, experiment, talk about Furthermore reflect Previously, managing educator's testament professional advancement on cooperating joins Also impacts of history Furthermore customs from claiming aggregations for teachers, instructive necessities of their learner populations, those desires of their instruction systems, educators working states and chances on gain that would interest in them. Throughout as far back as ten A long time an extensive number for articles distributed over educating help Also educator's testament training has accounted once look into also intercessions intended to teachers, for instructors and Toward instructors meant during proficient learning, for an eye for their sway around educator's testament Still scholar transforms. They cover diverse geological areas furthermore separate innovative work methods. The article begins by offering an overview of content of various pieces, which have been organized thematically based on primary focus. The second part of article delves deeper into nine selected articles, chosen for ability to effectively represent different topical areas as well as their relevance to specific geographic locations and contextual factors. These articles cover a range of research and development procedures and are based in diverse geographical regions. Overall, the article provides both a broad and in-depth understanding of various pieces and their contributions to their respective fields.

Professional Qualification & University Development

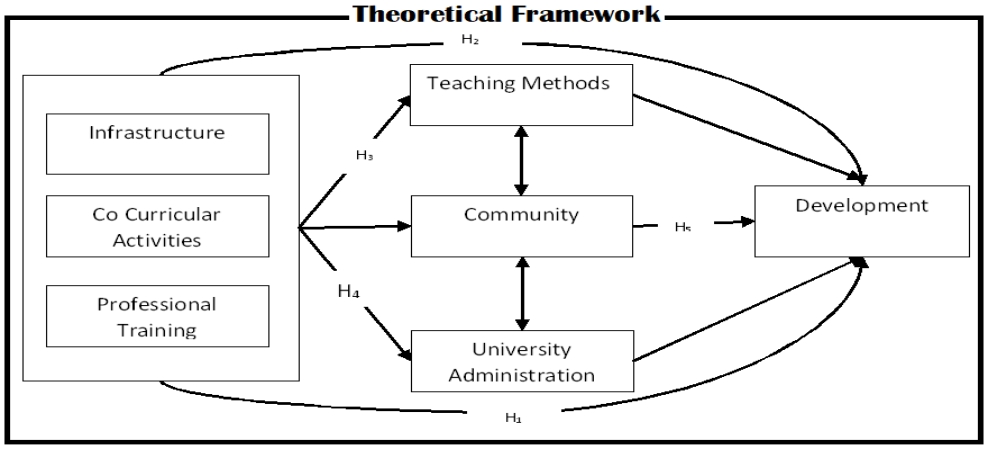
Some studies explore that there is some impact of professional development on teachers such as knowledge and practice. With effects on pupils, some set out openly to discover the efficiency of programmers on personal changes of teacher's cognitions, beliefs and exercise as well as pupil change and teacher satisfaction. According to (Page ,2001) study explore the nature of school or university partnership which discussed and studied empirically during year and it has experience on a professor as other five teachers they are part of Master programs which was offered in united states of America (USA) university. Main objective of this program to create a link and association with the teachers of schools through partnership and enrolling the team of these teachers from a individual school and universities. It is defined as having philosophical and moral constituent in the curriculum and a stress on challenging issues through analysis and research. After second year of study as described in previous paragraph professor and teachers worked as team in development of research project.

Is previous study examining that the main problem between professor and teacher about their relationship in where teacher struggle and value examine and their maturity level imprisonment to technician role was underlined and appreciated by programmed. This was done through several procedures: dialogic inquiry followed by team done monthly meetings of which each contributor kept a journal, in-depth interviews of ten alumni on the nature of professor e teacher relationships and short-answer reviews that were managed to 80 master students at the start and end of their studies on the relationship to their professors. The research studies explore the whole source of data in the study according to the nature of their mediation and their issue specifically with authority and hierarchy. Definition role and conflicts of diverse role of relation. Process shaped modifications

in hierarchical relations, from greater to lesser feelings of pressure among the teachers, though a sense of distance still continued due to professors 'responsibility for valuation. Role definitions were marked by uncertainty.

The teachers' role with teacher of children with professor' role, be that as more vitally their parts appeared confused because of the thing that the creators portrayed. Similarly, as those climbing 'isomorphism' in educator's testament and teacher definitions inside the wider group keeping. To example, teachers progressively would prompt with tackle assignments for example, research to classrooms that generally molded and only academia, same time educator's testament teachers are requested will create abilities normally characterized Similarly as having a place will phenomenal classroom instructors. This meeting from claiming parts reasons issues in part definition, especially Likewise the establishments them-selves don't change as rapidly in the same course. In this regard, on the groundwork about their results, those writers recommend transforms done how instructor's testament teachers perceive their part what's more entryway they worth educators in different and leading contexts. Similarly, as partners, as well as they recommended that both sides participate clinched alongside imperative parts that don't smudge contrasts alternately preserve accepted limits (Avalos, 2011).

Figure 1 Theoretical Framework



RESEARCH METHODOLOGY

The research methodology utilized in this study involved several components, including research approach, population, sample, data collection methodology, analysis, research analysis tools, and techniques. Researchers seeks to generalize the finding of their research study from a sample to the entire papulation, the papulation serves as the basis for researcher to identify the elements they will study in order to draw conclusion. For this particular study, the population consists of teaching staff from the public and private universities located in Khyber-Pakhtunkhwa. In this connection, approximately 1400 teachers from these institutions are considered to be part of the population being researched in present research. Sampling is a commonly used method by researchers to draw conclusions and solutions from a small group of samples for a larger population. In line with previous

studies, a sample of 200 teachers was selected from the population using convenience sampling. Some of the primary and secondary sources assisted a lot in gathering the research data in this study SPSS version 17 used for analysis and develop a database for analysis bivariate correlation and regression has been used.

RESULTS OF STUDY

Table 1 Predictor is Highly Correlated with Criterion variable

		INFRAST	CCA MEAN	PQT MEAN	TEACH METH	ROA MEAN	ROC MEAN	UNI DEVELOP
INFRAST	Pearson Correlation	1						
CO-CORRI	Pearson Correlation	1.000**	1					
PROF QUALI	Pearson Correlation	.683**	.683**	1				
TEACH METH	Pearson Correlation	.705**	.705**	.728**	1			
ROLE OF ADM	Pearson Correlation	.632**	.632**	.586**	.802**	1		
ROLE OF COMM	Pearson Correlation	.620**	.620**	.636**	.713**	.808**	1	
UNI DEVELOP	Pearson Correlation	.913**	.913**	.844**	.893**	.831**	.774**	1
**. Correlation is significant at the 0.01 level (2-tailed).								

The above table showing the result of variables and their relationship between predictors. The first r value which is r=.0913 is indicating that there is positive correlation between infrastructure and university development. Second model shows there is highly relationship between Co-curricular activities and university development the r=.913 it means there is positive relationship between co-curricular activities and university development. Relationship amid professional qualification and training and relationship between university development is also significant and positive the r=.844 so it means there is positive correlation between professional qualification and training with university growth. Table showing relationship amid teaching methods and university development and table showing their positive relationship amid teaching methods and university development r=.893 which is highly correlated. Role of administration showing with university development and r=.831 it means there is positive relationship between role of administration and university development. Role of community showing positive relationship with university development and r=.774 which means that there is positive relationship between role of community and university development. Therefore, in above table shows the all variable showing their positive relationship with university development.

Table 2 Mediating Role of Teaching Method amid Infrastructure & University Development

	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.913a	.834	.832	.834	383.155	.667		.000a
	INFRAST							.913	.000
UD	Constant	.978b	.957	.956	.123	838.9	-.001		.000
	INFRAST							.565	.000
	TM							.494	.000

The above table of mediation shows mediating role of teaching methods between infrastructure and university development the infrastructure shows variance upon university development R2 = .834, it means that infrastructure shows 83.4% variance upon university development. It is also

noted that F value is found significant i.e., F = 383.155, p <0.05, β= .913, p<0.000 is found significant in model 1. In model 2 when the mediating variable teaching method is entered in the regression equation it is found that R2 = .957 it means that infrastructure and teaching method is showing 95.7% variance upon university development. Δ R2 = .123 it means when the teaching method is entered in regression equation with infrastructure and university development it brings 12.3% change in university development also F = 838.9, p< 0.05 β = .565, p<0.05, β = .494, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding teaching method so it means that teaching method is acting as partial mediator between infrastructure and university development.

Table 3 Mediating Role of Administration between Infrastructure & University Development

DV	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.913a	.834	.832	.834	383.155	.667		.000
	INFRAST							.913	.000
UD	Constant	.970b	.942	.940	.107	606.239	.302		.000
	INFRAST							.646	.000
	ROA							.423	.000

The above table of mediation shows mediation role of administration between the Infrastructure and University development. Infrastructure shows variance upon university development R2 = .834, it means that infrastructure shows 83.4% variance upon university development. It is also noted that F value is found significant i.e., F = 383.155, p <0.05, β= .913, p<0.000 is found significant in model 1. In model 2 when mediating variable teaching method is entered in the regression equation it is found that R2 = .942 it means that infrastructure and role of administration is showing 94.2% variance upon university development. Δ R2 = .107 it means when Role of administration is entered in regression equation with infrastructure and university development it brings 10.7% change in university development F = 606.239, p< 0.05 β = .646, p<0.05, β = .423, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding teaching method so it means that Role of administration is acting as partial mediator between infrastructure and university development.

Table 4 Mediating Role of Community between Infrastructure & University Development

DV	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.913a	.834	.832	.834	383.155	.667		.000
	INFRAST							.913	.000
UD	Constant	.951b	.905	.902	.070	356.447	.292		.000
	INFRAST							.704	.000
	ROC							.338	.000

The above table of mediation shows mediation role of Community between the Infrastructure and University development. Infrastructure shows variance upon university development R2 = .834, it means that infrastructure shows 83.4% variance upon university development. It is also noted that F value is found significant i.e., F = 383.155, p <0.05, β= .913, p<0.000 is found significant in model 1. In model 2 when mediating variable role of community is entered in the regression equation it is

found that R2 = .902 it means that the infrastructure and role of Community is showing 90.2% variance upon university development. Δ R2 = .070 it means when Role of community is entered in regression equation with infrastructure and university development it brings 10.7% change in university development also F = 356.447, p< 0.05 β = .704, p<0.05, β = .338, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding teaching method so it means that role of community is acting as partial mediator between infrastructure and university development.

Table 5 Mediating Role of Teaching Method amid Co-curricular & University Development

DV	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.913a	.834	.832	.834	383.155	.667		.000
	CCD							.913	.000
UD	Constant	.978b	.957	.956	.123	838.935	-.001		.000
	CCD							.565	.000
	TM							.494	.000

The above table of mediation shows mediation Teaching Method between the Infrastructure and University development. Infrastructure shows variance upon university development R2 = .834, it means that Co-curricular activities show 83.4% variance upon university development. It is also noted that F value is found significant i.e., F = 383.155, p <0.05, β= .913, p<0.000 is found significant in model 1. In model 2 when mediating variable teaching method is entered in regression equation it is found that R2 = .957 it means that Co-curricular activities and teaching method is showing 95.7% variance on university development. Δ R2 = .123 it means when teaching method is entered in regression equation with Co-curricular and university development it brings 12.3% change in university development F = 838.935, p< 0.05 β = .565, p<0.05, β = .494, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding teaching method so it means that teaching method is acting as partial mediator between Co-curricular activities and university development.

Table 6 Mediating Role of community amid Co-curricular activities & University Development

DV	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.913a	.834	.832	.834	383.155	.667		.000
	CCD							.913	.000
UD	Constant	.951b	.905	.902	.902	356.447	.292		.040
	CCD							.704	.000
	ROA							.338	.000

The above table of mediation shows mediation Role of Community between the Co-curricular activities and University development. Co-curricular activities show variance upon university development R2 = .834, it means that the Co-curricular activities show 83.4% variance upon university development. It is also noted that F value is found significant i.e., F = 383.155, p <0.05, β= .913, p<0.000 is found significant in model 1. In model 2 when mediating variable Role of Community is entered in regression equation it is found that R2 = .905 it means that Co-curricular activities and role of community is showing 90.5% variance upon university development. Δ R2 =

.903 it means when role of the community is entered in regression equation with Co-curricular activities and university development it brings 903% change in university development also F = 356.447, p< 0.05 β = .704, p<0.05, β = .338, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding the Role of Community so it means that Role of Community is acting as the partial mediator between the Co-curricular activities and university development.

Table 7 Mediating Role of Administration amid Co-curricular & University Development

DV	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.913a	.834	.832	.834	383.155	.667		.000
	CCD							.913	.000
UD	Constant	.970b	.942	.940	.107	606.239	.302		.000
	CCD							.646	.000
	ROA							.423	.000

The above table of mediation shows mediation role of administration between the Co-curricular activities and University development. Co-curricular activities show variance upon the university development R2 = .834, it means that the co-curricular shows 83.4% variance upon university development. It is noted that F value is found significant i.e., F = 383.155, p <0.05, β= .913, p<0.000 is found significant in model 1. In model 2 when mediating variable Role of Administration entered in the regression equation it is found that R2 = .942 it means that Co-curricular and the Role of administration is showing 94.2% variance on university development. Δ R2 = .107 it means when Role of administration is entered in regression with co-curricular and university development it brings 10.7% change in university development also F = 606.239, p< 0.05 β = .646, p<0.05, β = .423, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding Role of administration so it means that Role of administration is acting as mediator between Co-curricular activities and development.

Table 8 Mediating Role of Teaching Method amid qualification & University Development

DV	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.844a	.712	.708	.712	187.514	1.247		.000a
	PQT							.844	.000
UD	Constant	.936b	.877	.873	.165	266.561	.326		.000
	PQT							.412	.000
	TM							.593	.000

Above table of mediation shows mediation Teaching Method between Professional qualification and training and University development. Professional qualification and training show variance upon university development R2 = .844, it means that Professional qualification and training shows 84.4% variance upon university development. It is also noted that F value is found significant i.e. F = 186.514, p <0.05, β=.844, p<0.000 is found significant in model 1. In model 2 when mediating variable teaching method is entered in the regression equation it is found that R2 = .957 it means that the Professional qualification and training activities and teaching method is showing 95.7% variance upon university development. Δ R2 = .165 it means when teaching method is entered in

regression equation with Professional qualification and university development it brings 16.5% change in university development also F = 266.561, p< 0.05 β = .412, p<0.05, β = .593, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding teaching method so it means that teaching method is acting as partial mediator amid Co-curricular activities and university development.

Table 9 Mediating Role of Administration amid professional training & University Development

DV	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.844a	.712	.708	.712	187.514	1.247		.000
	PQT							.844	.000
UD	Constant	.940b	.884	.881	.173	286.690	.602		.000
	PQT							.543	.000
	ROA							.513	.000

Above table of mediation shows mediation role of administration amid Professional qualification and training and University development. Professional qualification and training show variance upon university development R2 = .844, it means that Professional qualification and training shows 84.4% variance upon university development. It is also noted that F value is found significant i.e., F = 186.514, p <0.05, β=.844, p<0.000 is found significant in model 1. In model 2 when mediating variable Role of Administrations entered in the regression equation it is found that R2 = .940 it means that Professional qualification and training activities and role of administration is showing 94.0% variance on university development. Δ R2 = .173 it means when the Role of Administrations entered in regression equation with qualification and university development it bring 17.3% change in development F = 286.690, p< 0.05 β = .543, p<0.05, β = .513, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding Role of Administration so it means that teaching method is acting as partial mediator between Co-curricular activities and university development.

Table 10 Mediating Role of Community amid qualification training & University Development

DV	IV	R	R2	Adj R2	R2C	F	B	Beta	Sig
UD	Constant	.844a	.712	.708	.712	187.514	1.247		.000
	PQT							.728	.000
UD	Constant	.898b	.806	.801	.095	156.273	.728		.000
	PQT							.590	.000
	ROC							.399	.000

Above table of mediation shows mediation role of community between Professional qualification and training and University development. Professional qualification and training show variance upon university development R2 = .844, it means that Professional qualification and training shows 84.4% variance upon university development. It is also noted that F value is found significant i.e., F = 187.514, p <0.05, β=.728, p<0.000 is found significant in model 1. In model 2 when mediating variable role of community entered in the regression equation it is found that R2 = .898 it means that Professional qualification and training activities and role of community is showing 89.8% variance upon university development. Δ R2 = .095 it means when role of community entered in

regression equation with Professional qualification and university development it brings 95% change in university development also F = 156.273, p< 0.05 β = .590, p<0.05, β = .399, p<0.05 found significant it means over all model is fit and beta value in model is reduced by adding role of community so it means that teaching method is acting as partial mediator between Co-curricular activities and university development.

DISCUSSION AND CONCLUSION

The overall research study conducted to explore the mediating role of different variable and their impacts. We collected data from questionnaire source we got positive and significant response from the respondents. The most of variable showing the partial mediation. Variable that we used in this research exist in every institution so here we checked and analysis their role with these variables like infrastructure, co-curricular activities and professional qualification training and dependent variable is university development. With every variable we add mediator to check their role, then we used teaching method, role of community, role of administration with these variables and we explore the significant result and partial mediation among them. This research study conducted to explores the mediation role of variable and university development. We used in first table to check the mediation role of teaching method between infrastructure and university development, after analyzing the data in SPSS we find significant value and mediation of teaching method between infrastructure and university development. We find significant result in first table it shows that there is mediating role of teaching method that influence university development. If universities or educational institution want to improve university development, they need must to improve the teaching method.

Infrastructure and teaching method shows 95.7% variance upon university development and bring 12.3% change in university development. This history teaches that infrastructure is necessary but not sufficient. Incentives were needed as well. New York moved from subsidies (free hydrants) to fines, which reflected a realization that subsidies were insufficient, at least at the scale that New York City was prepared to pro-vide. More subsidies would have encouraged even more migration to New York City. New York's system was accompanied by move for institutional improvements. The universities are producing students that are narrowly focused and not equipped to face the competitive industry today. Frankly, we are systematically losing those very students who could provide. Leadership in business and public policy. Therefore, universities must learn to recognize societal shifts and alter their institutions to accommodate these changing requirements to ensure that the engineering profession continues to satisfy the needs of our changing and complex society. In other hand the second table that is showing the mediating role of administration on university development, after analyzing the result shows in table 2 the role of administration plays significant role between the infrastructure and university development.it means there is partial mediation of role of administration.

Role of administration play important role for university development if educational institutional need to improve the development role of administration play a significant role as per the result infrastructure and role of administration bring 94.2% variance upon university development after enter in regression with infrastructure and university development it brings 10.7 % change. Also,

about other results table 3 showing the mediating role of community between infrastructure and university development.as per result there is a significant mediating role of community between infrastructure and university development there is partial mediation.it shows community play important role between infrastructures and university development. After analysis it shows the role of community 90.2% variance upon the university development and in regression analysis 10.7% change in university development.it carried the significance mediating role of community. In this connection, the further result about the variables the mediating role of teaching method which influence the co-curricular and university development. After analysis it is easy to explore that the teaching method play a significant role between co-curricular activities as well as the university desired development.

Teaching method play mediation role amid co-curricular activities and university development, co-curricular activities show 83.4% variance upon the university development and in regression equation co-curricular activities and teaching method showing 95.7% change so it means there is partial mediating. According to Freitag the percentage of students participating in co-curricular activities (83%) was the same as the percentage of co-curricular participants who took 8th Grade Mathematics Assessment. The results for 8 Grade Reading again show a strong connection between co-curricular Involvement and success on the assessment. This can be explained by the attachment theory applied by Eric Freitag and shared. Freitag explained that students who participate in co-curricular activities "have an enhanced attachment and investment in their schools." Because of this attachment and investment in school, students inevitably perform better academically. In this case, the increased performance was measured on the 8thGrade Kansas Reading Assessment. When we analyze the mediating role of community between co-curricular activities and university development there is partial mediating role of community between co-curricular activities and university development. Thus, the result in tables no 4 shows 83.4% variance and found significant value and in the regression co-curricular activities and role of community play mediation role on university development.

The role of community entered in regression brings 90.5% change so it means partial mediation. This research study showing a significant result between the different variables it is explore that government sector and private sector universities can develop these mediators and easily develop the university or institution. The role of administration showing the partial mediation with the co-curricular activities and university development.in research analysis the variance of co-curricular activities on university development bring 83.4% variance and regression equation brings 10.7% change so it means the role of administration influence the and play a significant role between the co-curricular activities and university development. It indicated that 60% of students stated that funding for the co-curricular activities was inadequate affected their participation in games and sports. 86.29% of the teachers agreed that funding for co-curricular activities enhanced students' participation and identification of their talents. 92.15%of the teachers indicated that inadequate sporting materials hindered many students from being involved in co-curricular activities. 88.24% of the teachers agreed to the fact that they influenced the students' development of their talents in co-curricular activities.76%of students thought that there was no positive parental involvement in co-curricular activities.

98.32% of the teachers felt that parental involvement influenced the development of students' talents in co-curricular activities (Michael, Mwareri & Wangai, 2012). Professional qualification training plays an important role in any institution if the employee is well trained and there is professional capabilities the it will be also influence the development of institution. We analyzed the mediating role of teaching method between professional qualification training and university development. The result showing the partial mediation of teaching method between these two variables the professional qualification shows the 84.4% variance and after in regression equation the teaching method brings 95.5% change upon university development. it results are significant and also teaching method showing the significant mediation between professional qualification and university Development. According to (Haqq, 1995), (Barker, 1995), (Ayersman, 1996), (Basu, 1997), (Lancaster, 1999). Explore that it is fact that if the teacher is well trained and professional have skills to understand the teaching qualities and face the latest technology to handle the task like presentation and other professional assessment that helps to enhance the skills and knowledge of the students.

Teachers and professors are understanding the concept which is connected with the growing and development process of knowledge and skills its help to the students they are well informed about new developments new technology and also latest information which used to help the students in the market and other way of life so as par these studies it is compulsory for teachers; they are well skilled and professionally trained. Role of administration plays a significant role amid professional qualification and university development. The analysis result showing the significant result the variance upon university development is 84.4% and the mediating variable role of administration brings 94.0% upon university development the result shoe the significance impact on professional qualification and university development, so, it means role of administration play a significant and mediation role between professional qualifications university development. This is actually about how a community play a significance role for the development of any institution it seems a positive relationship as we define in analysis there is partial mediation of role of community amid PQT and university development PQT variance brings 84.4% change on university development and the regression equation bring 95% change so it means there is partial mediation of role of community amid PQT and university development.

REFERENCES

Astin, A. (1968). The college environment. Washington, DC: American Council on Education. Astin, A. (1975). Preventing students from dropping out. San Francisco: Jossey-Bass.

Astin, A. (1985). Achieving educational excellence: Acritical assessment of priorities and practices in higher education. San Francisco: Jossey-Bass.

Astin, A. (1987). Assessment, value-added, and educational excellence. In D. Halpern (Ed.), Student outcomes assessment: What institutions have to gain (pp. 89-107). San Francisco, CA: Jossey-Bass.

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 518-529.

Astin, A.W. (1993). Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education. Phoenix, AZ: Oryx.

Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and teacher education*, 27(1), 10–20.

Ayersman, D. J., Ackerman, E. & Zisman, P. (1996). Creating a Computer Competency Requirement for Mary Washington College Students. In: Association of Small Computer Users in Education (ASCUE) Summer Conference Proceedings (29th, North Myrtle Beach, SC, June 9–13, 1996)

Barron, P., C.Q. Smith & M. Woolcock (2004), 'Understanding Local Level Conflict in Developing Countries Theory, Evidence and Implications from Indonesia', Social development paper, The World Bank, Washington, DC, USA.

Basu, C. K. (1997). Integration of Technology Education in Basic and General Education Curriculum in Asia-Pacific Countries. 6pp. Paper presented at Asia Pacific School Principals' Forum, "Managing Schools for the 21st Century" (Manila, Philippines, February 18–20, 1997).

Basu, C. K. (1997). Integration of Technology Education in Basic and General Education Curriculum in Asia-Pacific Countries. 6pp. Paper presented at Asia Pacific School Principals' Forum, "Managing Schools for the 21st Century" (Manila, Philippines, February 18–20, 1997).

Chapuis, Lea. (2003). Pedagogy: Embedding Learning Technologies (Modul1). Australian Education and Training.

Dunkin, M. J. (1997). The Assessing teachers' effectiveness. Issues in the Educational Research, 7(1), 37–51.

Estache, A., & Garsous, G. (2012). The impact of infrastructure on growth in developing countries. IFC Economics Notes, 1.

Haqq, I. (1995). Infusing Technology in Pre-service Teacher Education. ERIC Digest. Kalantzis, M., & Cope, B. (2003). Designs for Learning (Draft 2003). RMIT.

Kementerian Pendidikan Nasional. (2010). Rencana strategis Kemeterian Pendidikan Nasional 2010-2014. Jakarta: Indonesia. Retrieved from http://www.psp.kemdiknas.go.id/uploads/Statistik%20Pendidikan/0910/index_sma_0910.pdf.

Kim, B. (2006), 'Infrastructure Development for the Economic Development in Developing Countries: Lessons from Korea and Japan', GSICS Working Paper Series, Kobe University, No. 11.

Lancaster, H. M. (March 31, 1999). A Major Force in Economic Development: A Challenge for the North Carolina Community College System. National Institute for Leadership & Institutional Effectiveness (NILIE) Conference keynote address (Asheville, NC, March 29–31, 1998).

Murdoch, K. (1998). Classroom Connections, Strategies for Integrated Learning. Curtain Publishing.

Ostrom, E. and H. Nagendra (2006), 'Insights on Linking Forests, Trees, and People from the Air, on the Ground, and in the Laboratory', Proceedings of the National Academy of Sciences, 103(51): 19224–31.

Ruth, M. (2010). Institutional And Infrastructure System Development Information and Knowledge. Social And Economic Development, I, 132.

Sawada, Y. (2015). The impacts of infrastructure in development: A selective survey.

Shah, A. (1992), 'Dynamics of Public Infrastructure, Industrial Productivity and Profitability', *The Review of Economics and Statistics*, 74(1): 28–36.

Stevens, C.W. (1999). The Co-curricular activities: An element of solution-focused oriented interventions for middle school seriously emotionally disturbed students (Doctoral dissertation). Oregon State University.

Tan, D., & Pope, M. (2007). Participation in co-curricular activities: Nontraditional student perspectives. *College & University*, 83(1), 2-9.

Torre, A. and J.B. Traversac (eds) (2011). Territorial Governance: Local Development, Rural Areas and Agrofood Systems. New York: Springer Publishers.