Evaluation of Education Policy Implementation in Vietnam

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Author’s contribution
The sole author designed, analysed, interpreted and prepared the manuscript.

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1. INTRODUCTION

The education policy in Vietnam is on urgent need to address the requirements of development, industrialization and modernization in conditions of socialist-oriented market economy and international integration. The resolution has evaluated the situation and indicated the reasons for the shortcomings and weaknesses in education [1]. The resolution deals with education policy problem with different principles on education policy objectives and

Keywords: Education policy; policy evaluation; education policy solution.
education policy solutions for fundamental and inclusive renewal of education in the spirit of fundamental, inclusive education in Vietnam for coming decades. The overall objective of education policy is substantively directed to improve quality and efficiency of education system towards for sustainable development. The education system is sustainable [2] which is the most concerned of the education policy reform. Further the education policy needs to be often re-formulated in the context that arising some problems in high school and higher education in Vietnam [3], thus making it necessary to monitor regularly and evaluate the implementation of education policy in Vietnam during this period in order to make the most appropriate adjustments for education policy with set of education policy recommendations.

The education management in Vietnam is still weak in terms of the distinction between state management and administrative activities in educational system. The quality management, inspection, supervision have not been properly implemented in educational management. The coordination among state agencies for education management is still loose. Also, the cooperation among educational management agencies and educational units with social organizations and families is not tight enough. At the same time, the national efforts and the capacity of the majority of families to invest in education are lower than required. Because of unbalanced demand – supply side reason, Vietnam's economy is still in the middle income subject to low resources and weak conditions for higher education that did not meet requirements to compete in terms of educational quality compared with the higher economic growth [4].

The result of the evaluative research was analyzed, presented by the respective sessions, the 1st Session, the theoretical framework is presented; the 2nd Session, the background information about Vietnam case study is provided; the 3rd Session, the research methods which were used in this evaluative research; the 4th Session, the research findings including the evaluation of policy solutions, policy objectives and policy instruments which are evaluated for the education policy reform in Vietnam’s context.

2. THEORETICAL FRAMEWORK

There is an argument that the policy evaluation is an indispensable tool for feedback, learning, and thus improvement. Kitamura given the education indicators to examine the policy making process in the education sector of developing country is incomplete theoretical framework for the education policy evaluation [5].

We also see that a need to address a public problem is perceived by all in consensus pattern. And then there are still various possible policy solutions have been analyzed and considered around, finally some policy solutions are selected, and bring them into practice. A government often evaluates them how the policy solutions are working. Obviously, there are many policy stakeholders expected to participate into policy evaluation in order to express their support or opposition to the existing policy. The public policy evaluation thus refers to all policy stages of the policy process. Gerston substantially defined that “policy evaluation assesses the effectiveness of public policy in terms of its perceived intentions and results” [6]. Also, Howlett et Ramesh given that the policy objectives and policy solutions and policy instruments related to policy problems solving are important to evaluate. After the policy evaluation, the policy problem and policy solutions may be re-thought completely, the public policy recycles with new phase of agenda setting or termination [7]. This contributes to set up the theoretical framework for the education policy evaluation.

In the literature of education policy, Buchert and William and Cummings given that these areas of education reform are included the access to education, equity in education, quality education, relevance of curriculum, internal efficiency, external efficiency, cost/financing education [8,9]. They are going along with education policy measurement, these education indicators to examine the policy making process in the education sector of developing countries [5]. In the literature of the evaluation of policy, importantly the evaluation of public policy implementation focuses on how are the policy solutions and policy instruments used [7].

Especially the cause-effect relation and mean-end relation in public policy logic was discussed by author in a period of time [10]. Vedung given the policy evaluation models can be used [11].

The clarification of importance of education policies and objectives they represent and the analysis of past and present data and situations are indispensable [12,13].
Therefore, the education policy evaluation will concentrate on policy objectives with a set of education reform are such as access to education, equity in education, quality education, relevance of curriculum, internal efficiency, external efficiency, cost/financing and policy solutions and their instruments whether we can improve the achievement of education policy as well as have a critical look at the education policy actors.

3. BACKGROUND INFORMATION

The background of Vietnam case study in education policy implementation is taken into account, first of all the annual income per head is approximately 2,500 USD, the population reached 95 Mil. under the challenge of quality and equitable development.

In Early Childhood Education, in the 2013-2014 school year, the whole country has only 18 provinces and cities recognized as having achieved the standard of preschool univerzalization for 5-year-old children. By 2017, 63/63 provinces and cities have achieved Standard of preschool univerzalization for 5-year-old children.

In general education, the Resolution 29 determined that "striving to 2020, there are 80% of young people in the age reach high school education level and equivalent". In 2017, the numbers of high school students in Vietnam are over 2.5 million and the numbers of high school and vocational students in 2016 and 2017 are about 600 thousands. Thus, a total of over 67% of young people in the age group reached the level of high school education and equivalent.

In the report "Smarter Growth: Learning and Fair Development in East Asia - Pacific", in 2018 of the World Bank, it confirmed 7 of the top 10 innovative education systems of the world education is located in the East Asia - Pacific region, in which the development is really impressive in the education system of Vietnam.

In the past 5 years, the achievements of Vietnam national teams in international and regional Olympic competitions have remained high. Especially, in 2018 the International Olympic team in Biology achieved excellent results, there was 01 student who achieved the highest score in all candidates and was honored by the Organizing Committee as the Winner. In the period of 2012 - 2018, Vietnamese students attended the Intel ISEF competition held in the United States with the participation of over 100 countries around the world and achieved 22 awards. In particular, in 2017, Vietnam is one of five countries with the most awards of the competition.

Regarding to higher education, up to now, there are 23 higher education institutions which is piloted by an ‘autonomy’ mechanism according to Resolution No. 77 / NQ-CP dated October 24, 2014. Before 2014, there were only 15 training programs of two National Universities that were evaluated and verified by regional and international organizations. By 2018, there were 104 training programs from 15 other universities in Vietnam that were evaluated by international accrediting organizations (AUN-QA of ASEAN, CTI of France, ABET and AACSB) for their quality recognition.

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<th>Table 1. A summary of higher education in Vietnam</th>
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<td>University</td>
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(Source: Ministry of Education and Training, Vietnam)
At the same time, there are 06 higher education institutions participating in school-level accreditation, being awarded the Higher Education Research and Higher Education Evaluation Council (HCERES) and ASEAN University Quality Assurance Network (AUN-QA) with quality assessment and recognition.

Before 2014, only Hanoi National University entered the Asian university rankings (QS Asia) of QS University Rankings (Quacquarelli Symonds) among the top 250 universities until 2018. There are now 5 higher education institutions in a group 400 of QS Asian university rankings.

In particular, there are two National Universities are among the top 150 schools in Asia (6,000 Asian universities). Especially, for the first time Vietnam has been named in the international university rankings, two National Universities are among the top of 1,000 universities in the world according to QS World University ranking (the world has more than 21,000 universities). In addition, there were 03 other universities that achieved 3-star level, 1 of which achieved 4-star rating according to the world university star standard (QS Star Rating).

The rate of university graduates having jobs improved from time to time in Vietnam. The independent survey results on employment through direct interviews with 25,000 graduates after 12 months of 50 universities in the Northern and Southern and Central Vietnam regions which was implemented by the Center for Educational Quality Accreditation - National University of Hanoi shows that the average rate of graduates with jobs is 84% (excluding the number of people going to school), many schools reach 85-97%.

In a type of continuing education, there are many localities have implemented measures to mobilize older people to learn illiteracy eradication classes, with the coordination of many social forces. Therefore, 100% of provincial and district units and 99.9% of commune-level units achieved the level 1 illiteracy elimination standard and 80.3% of commune-level units were recognized to be level 2 illiterate elimination standards.

The Ministry of Education and Training has also submitted to the Prime Minister for promulgation 02 projects on teaching Vietnamese to overseas Vietnamese in order to promote the teaching of Vietnamese to overseas Vietnamese and foreigners in Vietnam. The Ministry of Education and Training directs the development of the Vietnamese Program according to the 6-level competence framework.

Up to now, the quality and effectiveness of education in Vietnam has been lower than it expected, especially in higher education. The quality of human resources has not been satisfied in the labor market; the education inequality has not been fully achieved [14]. The education system is lacking in communication among levels and between modes of education. The education is evaluated too heavy theory, but light practice. The education is not linked to scientific research, production, business and labor market needs. It has not yet paid much attention to the moral education, lifestyle and work skills. The method of education, examinations, tests and evaluation of results are backward, lack of substance.

Management of education is still weak, namely the teachers and lecturers and educational managers are often shortcomings in quality, quantity and structure. Some of them do not keep up with the demand for innovation and education development. Some of them are lack of enthusiasm, even having violations of professional ethics.

Some studies indicated that investment in education is still ineffective. The financial mechanisms for education are not appropriate. The material and technical facilities are lacking and backward, especially in deep-lying, remote areas and areas with special difficulties in mountain and islands.

The quality of education is not so good enough to follow the inquiries of human resources development. This demonstrated by qualitative survey such as quality and effectiveness of education and quality of human resources do not meet the requirements, lack of policy communication during implementation, imbalanced education for knowledge and skills and moral ethics, weak management of education including the financial management etc. The results of interviews were shown, thus there are also numbers of qualitative replies to the guiding questions of in-depth interview sessions which are described as follows: “Quality and effectiveness of education and training has been lower than required, especially in higher education”. “Quality of human resources has not been met the requirement, inequality education
has not been solved somewhere”. “Education and training system is lacking in communication; also heavy theory, light practice. Education and training is not linked to scientific research, production, business and labor market needs”. “We have not paid much attention to the moral education, lifestyle and work skills. The method of education, examinations, tests and evaluation of results are backward, lack of substance”. “Management of education and training is still weak, education managers are shortcomings in competent quality; ones do not keep up with the demand for innovation and education development, lack of enthusiasm, even not compliance with professional ethics”. “Investment in education and training is ineffective and financial mechanisms for education and training are not appropriate. The material and technical facilities are lacking and backward”.

4. EVALUATION METHODS

From theoretical framework, the evaluation methods used the policy evaluation models which concentrated on the effectiveness of the implementation of education policy solutions and policy instruments. The mixed qualitative and quantitative methods are applied for this evaluative research including case studies and multivariate regression analysis. The single linear regression equation has the relation of dependent variable (Y) and independent variable (X) as follows: \( Y = \alpha + \beta x \). The multivariate linear regression model can be generalized as follows [15]:

\[
Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_k x_k + \epsilon.
\]

The data collection was done by studying education policy on the spirit of Resolution [1], from sending a total 300 questionnaires for the survey, the evaluative survey was conducted with 265 informants including lecturers and public employees in educational management for evaluation of the implementation of the education policy in the period 2013-2018. The survey was done in two locations: Ha Noi and Da Nang city. In 265 informants, there are 78 education administrators accounting for 29.4%, of which 05 are employed by the Ministry of Education and Training, 21 by the Department of Education and Training (DoETs), 52 by the Universities in Hanoi and Da Nang city. In these informants, there are 187 lecturers, accounting for 70.6% in universities in Hanoi and Da Nang. The data collection was conducted by the in-depth interview and questionnaire survey; they were administered by field supervisors in this evaluation.

5. RESULTS OF EVALUATION

5.1 Evaluation of the Implementation of Education Policy Solution

Following the educational policy objectives, the concrete policy solutions and education policy outcomes are evaluated as follows:

1st Policy solution: Strengthening leadership for education reform.

It aggregates thoroughly to implement the views, goals, tasks and innovative solutions basic, comprehensive education and training in the political system, education and training and the whole society, creating the high attention regarding to education and training as the top priority of national policy. At the same time, the education policy advocates have raised awareness about the decisive role of the quality of education and training of teachers and educational administrators. Especially all learners are the central subject of the educational process. The family has the responsibility to coordinate with the school and society in the education of personality and lifestyle of their children. The policy dissemination is to unify awareness, create consensus and mobilize participation in the assessment, supervision and criticism of the whole society for the renewal, development of education.

The key principles for education policy development have been taken into consideration so that the leadership for education policy implementation was strictly done by the educational viewpoint of the Communist Party of Vietnam (CPV) on the Resolution No. 29-NQ/TW [1].

Firstly, the education is the leading on the top priority of national policy. All types of investment in education can be considered as a developmental investment, which is prioritized in socio-economic development programs and policy planning.

Secondly, the basic and comprehensive renovation of education is required for policy solutions and policy instruments. Based on
guiding socialism ideology to the objectives, policy solutions and policy instruments and conditions for implementation, education policy innovation all must be original from the CPV’s leadership. The state management to the administration of education and educational organizations and the participation of families, communities, society and learners themselves must be innovative in all levels. In the process of innovation, it inherits and promotes the achievements, develop new policy instruments, selectively absorb world experiences; resolutely correct the perceptions, the deviation. The renovation ensures systematic, long-term vision toward equitable socialism, suitable for each type of subjects and levels. However, from evaluation, it was shown that the solutions are not synchronous, feasible, with focus on a roadmap with appropriate steps.

The education development is to improve people’s knowledge, quality human resources and foster talents. However, from the evaluation it did not transform the education process from the predominantly knowledge-based to the comprehensive development of the learner’s capacity and qualities. From evaluation, it however showed that the concept of learning with practice and reasoning with practice, school education in a combination with family education and social education are not implemented.

The education development must be linked to the need for socio-economic development and national defense as well as with scientific and technological advance; it must be consistent with objective rules. From evaluation, the education development is sometimes not to focus on quality and efficiency while meeting the requirements.

The renew education systems towards open, flexible among different levels and modes of education. From evaluation, it requires standardization and modernization by educational internationalization.

Beside that the education could not promote well positive aspects, limit the negative side of market mechanism, ensure socialist orientation in education as well as harmonious development model, support between public and non-public education, among regions north – central - south. It also could not prioritize investment in the education development in the areas with exceptional difficulties, ethnic minority, border, island, remote areas [16]. The education investment must go with democratization, socialization in education system. The active internationalization in education development did not meet the requirements of national integration [16]. The in-depth interview showed that the importance of education development toward more political and ideological work in the educational institutions. All of the academic institutions and the universities and education management agencies all exist a party cell so that the Party committees in education and educational institutions are really innovative, exemplary and accountable to the Party and people for organizing the successful implementation of the objectives and tasks of education policy. The results of the in-depth interview showed that: The leaders of the educational institutions promote democracy to rely on lecturers and students as well as the role of mass organizations and local people. The sector ministries and localities need to develop long-term planning for human resource development, forecasting the demand for quantity and quality of human resources and the structure of occupations and qualifications. Based on that, it can order and coordinate with the educational institutions. It also enhances the combined strength of the whole political system, resolutely solve the negative phenomenon lasting, causing urgent in the field of education and training.

According to a preliminary report on the implementation of Resolution No. 29-NQ/TW [16], this policy solution has performed relatively well. The official report affirmed a high need for better policy communication to ensure high level of awareness at all policy actors.

2nd Policy solution: Renovate education and training to develop qualities and capabilities of the learner.

The educational facilities are openly defined by objectives and outcomes of individual grades and subjects, programs, departments and specialized training program which ensuring the improvement of quality of the whole education system and in each educational institutions. It is the basis for supervising and evaluating the quality of education and training. Up to date, on the websites of higher education institutions, the objectives and standards of each level of study, subjects, programs and branches have been publicized, thus it improved.

The active educational institutions have actively promoted new programs to develop the capacity
and quality of learners, harmonious moral, intellectual, physical and aesthetic; lecturers, methods. It renovated the contents of education in the direction of streamlining, modern and practical, suited to the age, level and trades; it supports for more practice, application of knowledge into practice. Through interviews, there are some major opinions that there are still not enough active educational institutions to innovate the training program. It is suggested that this is a limitation on the capacity of the lecturers and the capacity of educational institutions.

The education is still a shortage to focus on personality education, ethics, lifestyle, legal knowledge and awareness of citizens. Also the educational institutions have not yet played as incubation fully in the fundamental values of the culture, traditions and national morality, elite human culture, core values and humanity of Marxism-Leninism and Ho Chi Minh thought. The Ministry of Education and Training (MOET) has instructed educational institutions to perform well this task, from the beginning of the educational year.

Through evaluation, there are some reports summarizing the university operations and in-depth interviews showed that many educational institutions have an attention with intensity on physical education, knowledge of defense and security, and vocational, language and information technology standardization, ensuring the ability to use the learner. It helps to diversify content, learning materials, meet the requirements of all levels, education, training and lifelong learning needs.

As a result of in-depth interviews, there are some similar ideas that it requires to continue strongly renovating the teaching and learning methods in the direction of modernity and promoting activeness, initiative, creativity and application of knowledge and skills of learners. Apparently, it focus on overcoming one-way imposed teaching, remembering like a machine, and focus on learning how to think, encourage self-learning, create a basis for learners to update themselves and renew knowledge, skills, capacity development. There is a transition from primary school to class organization of diverse learning, then the attention to social activities, extracurricular, scientific research. It also promotes the application of information and communication technology in teaching and learning.

In order to renovate and standardize the contents of preschool education, attaching importance to combine both care and nurture with education suited to the psychological characteristics, requirements for physical development and personality formation. It is necessary to develop and standardize the contents of general education in the direction of modernity, streamlining, quality assurance, high integration in the lower classes and gradual division in the above classes. It helps to reduce the number of subjects required, it also increase subjectivity, subject matter and elective education. There are compiling textbooks, teaching aids and learning materials suitable for each subject, paying attention to ethnic minority students and students with disabilities. The professional education content is built in the direction of integrating knowledge, skills and professional working style in order to form professional capacity for learners.

From evaluation, if a change of education policy, the educational institutions can be active and innovative to the content of tertiary and postgraduate education in the direction of modernity, suitable for each branch, training group and stratification of the major education system. Therefore, it can be productive for the development of creative capacity as well as there are practical skills, professional ethics and social understanding, step by step approaching the advanced science and technology level of the world.

According to the final report on the implementation of Resolution No. 29-NQ/TW [16] and the National Assembly reported, this policy solution is being implemented at educational institutions. The outcomes are shown in recent survey represented for the evaluation of education policy implementation with fairly moderate with 49%, the average level is 13% (Fig. 1).

3" Policy solution: Renovation of the evaluation for education results to ensure honesty and objectivity.

The in-depth interviews showed that systematically examining and evaluating for the results of education were step by step done in accordance with the advanced criteria recognized by the society and the international education community. It coordinates the use of evaluative results in the course of study with the end-of-year evaluation. The evaluation of the
teacher and lecturer is done together with self-evaluated of the learners; the evaluation of the educational institutions is done along with the evaluation of the family and of the society. On the one side, it renovates the examination mode and recognition of high-school graduation in the direction of reducing pressure and costly for the society while on the other side, there is still ensuring the reliability, truthfulness and properly assessing pupils’ capacity as basis for the recruitment on vocational education and higher education.

The research on text reports and in-depth interviews revealed that the new set of methods of evaluating and recognizing vocational education graduates was based on knowledge, practical ability, discipline and ethics. There is a relevant mechanism for organizations and individuals to participate in evaluating the quality of educational institutions.

![Fig. 1. Renovate education and training to develop qualities and abilities of learners](Source: 2018 survey)

![Fig. 2. Renovate the evaluation of the results of education and training to ensure honesty and objectivity]
The admissions in recent years have shown that there has been a new way of applying for the admission in universities and colleges in the direction of combining the academic records and the requirements of the specific education sector. Through in-depth interviews, the evaluation of university education records started follow in the direction of attachment the importance of analysis, creation going with update and renew knowledge as well as their critical professional ethics. 

The in-depth interviews showed that there has been an evaluation of the quality of education and training at the national and local levels in many evaluation institutions according to international programs as a basis for the policy change. It proposes updated policies with renew policy solutions and policy instruments to improve the quality of education. 

Up to now, there are many educational institutions have improved the quality assurance system such as periodically inspect the quality of education and educational institutions for their training programs. It is important to the inspection, evaluation and control of the quality of education and training for private educational institutions involving foreign elements. In order to formulate the method of examination, the system employed the innovation focus towards capability, quality and efficiency of the actual work and creative energy. It is interesting that the job market can be a measure for measuring the learner capacity such as an important criterion for evaluating the prestige and quality of higher education institutions.

According to the final Report on the implementation of Resolution No. 29-NQ / TW [16] and the Reports of the National Assembly for Education, this policy solution is being implemented at educational institutions. However, the survey results showed the evaluation results that this policy solution performance evaluated by 23% informants and the average is evaluated by 49% informants.

4th Policy solution: Development of open educational systems for lifelong learning towards a learning society.

As a result of in-depth interviews, it was shown that this policy solution has strongly driven by the system of general education and ramification after junior high school and career orientation in high school. However, it is not good to re-plan the network of vocational education institutions, higher education in line with socio-economic development planning and human resources development planning. It promotes post-secondary and higher education, linkage between vocational education and higher education.

Apparently, it has organized and adjusted the network of universities, colleges and research institutes in the direction of linking training with scientific researches. In carrying out the stratified tertiary education institutions in the direction of research and application and practice, it is not to perfect the model of national universities and local universities at present. It consolidates and develops a number of higher-quality tertiary education and vocational institutions up to the regional and world advanced levels. Therefore, it encourages socialization to invest in the construction and development of high quality schools at all levels of education and training. The concept of socialization means to mobilize the funding from private sector contribution in Vietnam. Thus, it may increase the proportion of non-public schools for vocational education and higher education. Aiming at a target of the type of institution invested by the community, there is a diversification of training methods and training by credit, and to promote training and retraining of professional capacity and skills at production and business establishments and to have mechanisms for organizations and individuals to participate in the formulation, adjustment and implementation of training programs and assessment of trainees’ capacity.

According to the Report on the implementation of Resolution No. 29-NQ / TW [16] and the preliminary report of the National Assembly, this policy solution is being implemented at educational institutions throughout the country. As a result of the evaluative survey is shown that the policy implementation level is rather good reaching at 51% and the average level is 19%.

5th Policy solution: Reform education management to ensure democracy and increase autonomy and social responsibility of education and training establishment.

As a result of the in-depth interview, the responsibilities of state management agencies in charge of education, training and management responsibilities by branches and territories of ministries, branches and localities are clearly defined. However, it is not clear how the state
management of the education and educational institutions is managed. It may promote decentralization, raise responsibility, may create motivation and initiative of educational and educational institutions.

The effectiveness of state management is over the curriculum, content and quality of education and training of foreign education and educational institutions in Vietnam has been strengthened. It shows up the vital role of information technology and modern scientific and technological achievements in the state management of education and training in many educational institutions. The local education and training management agencies may take part in the decision on human resource and financial management together with the management of the professional tasks of pre-school education, general education and vocation training.

![Fig. 3. Renovate the open educational systems for lifelong learning towards development of a learning society](image)

![Fig. 4. Educational management reform ensures democracy and increases autonomy and social responsibility](image)
The measures are such standardization of quality assurance conditions and management of the training process as well as focus on output quality management. There is an establishment of an independent accreditation system for the quality of education and training. It renews the mechanism of receiving and processing information in the management of education and training. It may implement the mechanism of learners’ participation in assessing educational and training activities, so teachers can participate in assessment of management staff. Of course, the education institutions may participate in evaluating the state management agencies; it may perfect the mechanism for management of foreign-based education and education institutions in Vietnam as that it helps support the students and pupils to study abroad with state budget funds.

However, it is unrealized that the ‘autonomy’ and self-responsibility for the education institutions did not promote the role of the school board. It may carry out monitoring by school and social actors in order to intensify the inspection and examination by the managing agencies at all levels, thus it can be ensuring democracy, openness and transparency.

According to the final report on the implementation of Resolution No. 29-NQ / TW [16] and the reports of the National Assembly, this policy solution is being implemented at educational institutions throughout the country. As a result of the evaluative survey, the average level of policy implementation was 46%, with 15% of the respondents rated it very bad (Fig. 4).

6th Policy solution: Development of lecturers and education administrators to foster the quality of education.

The in-depth interviews showed that many educational institutions have set up plans for training and re-training of lecturers and educational administrators in line with the large demand for sustainable socio-economic development and businesses and society development adapted with the international integration. It may standardize the contingent of teachers at each educational level. Also, it may reach all primary, secondary, high school teachers and lecturers of vocational education institutions, who must have a university or higher degree and pedagogical capacity. All lecturers in colleges and universities with a master’s degree or higher level must be trained and fostered in pedagogy. In addition, the educational administrators at all levels must be trained in education management skills. It may help to develop the system of pedagogical schools to meet the objectives and requirements of training and fostering the contingent of teachers and educational administrators. It may prioritize the investment in the construction of a number of pedagogical schools, key technical pedagogical schools to overcome the dispersion in the system of teacher educational institutions. There is a need to have a mechanism for recruitment and selection to recruit qualified lecturers in the pedagogic field.

As a result, there is a positive tendency that educational institutions have strongly reformed their objectives, contents, methods of training, retraining, fostering and evaluation of lecturers’ learning results as required for quality improvement, ethics and professional competence.

Thus, these educational institutions have developed and applied preferential treatment for lecturers and educational administrators. However, the activities of recruiting, using, treating and honoring lecturers and educational administrators are not based on the assessment of professional ethics, morals and results-based performance. Here, these educational institutions have offered preferential treatment and set reasonable retirement age for highly qualified lecturers. From survey, found that it is unclear about the mechanism of dismissals, placement of other jobs or resolutely bringing out of the industry for people who do not have the qualities and capabilities, do not meet the requirements and tasks. So far the teacher’s priority is ranked highest in the system of administrative salary scale career and additional allowances depending on the nature of work, by region.

A result of in-depth interview, various facilities have been used to stimulate the contingent of teachers and educational administrators to improve their professional skills. There is a priority policy to support young lecturers on accommodation, education and scientific research. It may ensure education equality between public school teachers and non-public school teachers on honor and opportunities for professional training and fostering reformed education in Vietnam that creates conditions for international experts and overseas Vietnamese to participate in lecturing and research in domestic educational institutions. Thus, there are
vast facilities have deployed for these solutions, interconnected models and linkages between educational institutions, especially universities with scientific and technological organizations, and research institutes.

According to the Report on the implementation of Resolution No. 29-NQ / TW [16] and the Report of the National Assembly, this policy solution is being implemented at educational institutions throughout the country. As a result of survey shown that the results of the policy implementation are only moderately and fairly, and 35% of the respondents rated the average level, while 41% said it was quite good (Fig. 5).

7th Policy solution: Renovate financial management and mobilize financial contributions of society.

According to the evaluation survey, thereby the state still plays the leading role in investment for development of education and training. Thus the state budget for education and training is always shared by at least 20% of the total budget, so the innovative efforts for financial management have focused on improving the efficiency of using budget for education. The funding of professional activities for public education and educational institutions has not yet been adequately ensured. However, it is unclear how to improve the tuition as an initiative policy solution.

For pre-school and general education, the priority has been given to investment in the construction and development of public educational institutions and support mechanisms to ensure the gradual completion of the universal target by statutory provisions. It is unclear about solutions how to encourage the development of non-public schools in order to meet the social demands for high-quality education in urban areas.

As for higher education and vocational training, in recent years it has focused on investment in building a number of universities. However, the ordering mechanism has not yet been implemented on the basis of the economic-technical norms system and the quality standards of some types of training services (regardless of the type of educational institutions), so the payment is not corresponding to the education quality which is required by labour market.

In the past few years, the social mobilization has been strongly promoted for financial contribution, first of all for vocational education and higher education, encouraging links with prestigious foreign educational institutions. However, there is no solution to encourage healthy competition in education on the basis of ensuring the interests of learners, employers and educational institutions. In a context, if the state budget only supports policy beneficiaries, ethnic minorities and promotion of talents, it may equalize the right to receive state support for learners in public and non-public schools. Up to now, there is no effective policy instrument in a support for policy beneficiaries, ethnic minorities and credit mechanism for disadvantaged students to borrow money for their studies. It may need to

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**Fig. 5. Developing trainers and managers**
encourage the formation of scholarship funds, study encouragement, financial incentives, help students, poor students for their studies. It may commend and reward both individuals and collectives with excellent achievements and outstanding contributions to the education development.

As a result of in-depth interviews, there is no solution for encouraging businesses and individuals who have employees to participate in a support of training activities. It may establish appropriate financial mechanisms and incentive policy instruments for different types of schools so that adopts preferential credit mechanisms for educational institutions and carries out periodical auditing of educational institutions.

Over the past years, a support for building projects of infrastructure, especially technical infrastructure and information technology infrastructure has been carried out. The budget for pre-school education, general education, vocational education and higher education has been clearly defined with the budget allocated to the educational institutions, especially for the education institutions are belonged to the political system and the armed forces. However, the in-depth interviews showed that they are not close, open and transparent with the use of funds in these institutions.

According to the final report on the implementation of Resolution No. 29-NQ / TW [16], this policy solution is being implemented at educational institutions throughout the country. The evaluative survey show that 55% of the respondents rated the outcomes of policy implementation is bad the average achievement, 24% given that the achievement is just average (Fig. 6).

8th Policy solution: Improving the research and application of science and technology for education.

As a result of the in-depth interviews, there is a great deal of interest in research for education and education management, focusing on improving the capacity, quality and effectiveness of the academic activities. However, there are existing limitations in implementing the national research program in education.

It is evidenced that some universities have not strengthened their capacity to improve the quality and efficiency of scientific research and technology transfer of higher education institutions. Thus, there is no close connection between education and research, between educational institutions and production and businesses. It was required, but there is low investment in the development of basic science, spearhead science, key laboratories, specialized laboratories, hi-technology, modern experimental production facilities. It is good that there are some higher education institutions to set up their own policies to encourage students to study scientific research as well as expand their application.

Fig. 6. Renovation of financial management and mobilize financial contributions of society
There is no incentive to establish research institutes, research and technology transfer centers, science and technology enterprises, support for registration and exploitation of inventions in educational institutions. It is not to improve the mechanism of ordering and allocation of scientific and technological non-business expenditures for tertiary education institutions. Therefore, there is no merger of several scientific research institutions and technology deployment with public universities.

Over the past few years, there has been a sense of prioritized resources, focused investment and special mechanisms to develop a number of multidisciplinary researches in universities that reached regional and international levels on high expectation of raising capacity to cooperate and compete with the world's leading training and research institutions.

According to the final report on the implementation of Resolution No. 29-NQ / TW [16], this policy solution is being implemented at educational institutions. The evaluative results shown that the policy implementation results are relatively 45% average, 23% rather good, there is still 21% said it was bad.

![Fig. 7. Enhancement of the effectiveness of research and application of science and technology in education](image1)

![Fig. 8. Effectiveness of international cooperation in education and training](image2)
9th Policy solution: Enhancing the effectiveness of internationalization for education.

As a result of the in-depth interviews, there are some tertiary education institutions are good at internationalization and educational integration on the basis of maintaining their independence, self-reliance, ensuring socialist orientation. It may promote the good cultural values of the nation, to select the cultural quintessence and the achievements of science and technology of mankind. It may improve bilateral and multilateral cooperation mechanisms, implementation of international commitments on education and training.

However, the large scale of study abroad of lecturers and spearhead sciences has not been financed by the state budget. There is also no policy instrument to encourage to study abroad with funds outside the state budget. Also there are not many extensive training programs linking with prestigious overseas educational institutions, primarily in higher education and vocational with strict quality management. There are very weak mechanisms to encourage international organizations, individuals and overseas Vietnamese to participate in training, research, application and transfer of science and technology in Vietnam. As a result of implementation, it may strengthen communication for cultural and international academic, but it may not support policies and manage the learning and training of students studying abroad.

According to the Report on the implementation of Resolution No. 29-NQ / TW [16], this policy solution is being implemented at educational institutions. In the evaluative survey, it is shown that the results of the policy implementation reached average level, with 43% of the respondents rated the average, 31% said that it is rather good.

5.2 Model of regression analysis of education policy implementation in Vietnam

5.2.1 Policy solutions and modeling

The means-end relationship of policy solutions and effectiveness of education policy in Vietnam can be modeling [5], as that the following Table 2 is demonstrated by the regression models.

Table 2. Set up the regression models

<table>
<thead>
<tr>
<th>Set up variables</th>
<th>Variables coded</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable:</strong></td>
<td>Effectiveness of education policy in Vietnam</td>
</tr>
<tr>
<td><strong>Independent variables:</strong></td>
<td></td>
</tr>
<tr>
<td>Leadership in policy implementation</td>
<td>C1.Leadership</td>
</tr>
<tr>
<td>Renovate education and training to develop qualities and abilities of learners</td>
<td>C2.CompetentDevelopment</td>
</tr>
<tr>
<td>Renovate the evaluation of the results of education and training to ensure honesty and objectivity</td>
<td>C3.ReformExamination</td>
</tr>
<tr>
<td>Renovate open educational systems, lifelong learning and development of a learning society</td>
<td>C4.OpenEducation</td>
</tr>
<tr>
<td>Educational management reform ensures democracy and increases autonomy and social responsibility</td>
<td>C5.AutonomyUniversity</td>
</tr>
<tr>
<td>Lecturer development and capacity development for education administrators,</td>
<td>C6.LecturerDevelopment</td>
</tr>
<tr>
<td>Renovate financial management and mobilize financial contributions of society</td>
<td>C7.ReformFinance</td>
</tr>
<tr>
<td>Enhance the effectiveness of research and application of science and technology in education</td>
<td>C8.ResearchForEducation</td>
</tr>
<tr>
<td>Comprehensive internationalization</td>
<td>C9.Internationalisation</td>
</tr>
</tbody>
</table>
5.2.2 Single regression models

First of all, a correlation between two variables is used to develop a prediction equation, so the single regression model was built by a support of SPSS software (Version 22) used to predict separate independent variables in a correlation with the effectiveness of education policy in Vietnam that based on linear relationship between variables. The causal effect relationship of the first variable is leadership with effectiveness of education policy, the data is quantitatively measured and collected by the evaluative survey. We established the single regression model that summarized in the Table 3,4,5 (Annex).

From Tables 3, 4, 5 we can formulate: Y=0.721 X₁ + 19.179. It means, we would be able to predict the effectiveness of education policy as policy objective implementation in Vietnam from the correlation with the variable, leadership level in education policy implementation (See Fig 8).

Separately, we develop the single regression model for remained independent variables including C2-CompetentDevelopment, C3-ReformExamination, C4-OpenEducation, C5-AutonomyUniversity, C6-LecturerDevelopment, C7-ReformFinance, C8-ResearchForEducation, C9-Internationalisation. Through the summary table of univariate regression models analysis results, the values of p ≤ 0.05 were found - statistically significant (95%). The relationship between the dependent variable (the effectiveness of the education policy) and each independent variable has a linear relationship.

Similarly, we can establish simple linear regression models with each predictable variable affecting the effectiveness of education policy. Therefore, we have a group of the single variable regression equations as follows:

\[ Y = 19.179 + 0.721 \times \text{Leadership in policy implementation} \]

\[ Y = 28.285 + 0.457 \times \text{Educational focus on competency} \]

\[ Y = 85.196 - 0.602 \times \text{Open education} \]

We can see that the R of Leadership in policy implementation is the highest (0.763) > R of Educational focus on competency (0.566) > R of Open education (0.436) > R of Research for education (0.355) > R of Internationalization (0.246) > R of Lecturer development (0.201) > R of Reform of financial management (0.143).

For the \( R^2 \) value in Table 5, the value of statistics shown in the above univariate regression models are interpreted as follows: (1) Variation of the leadership in policy implementation can explain for 58.2% the completion of education policy objective (2) Variation of educational focus on competency in policy implementation can explain for 32.1% of the completion of the education policy objective (3) Variation of the open education can explain for 19% of the completion of education policy objective (4) Variation of the research for education can explain for 12.6% the completion of education policy objective. In additional the internalization and lecturer development and reform of financial management can explain for 12.3 % the completion of education policy objective. We can see that C1.Leadership \( (R^2 = 0.582) \)

\[ Y = 44.751 + 0.183 \times \text{Leadership in policy implementation} \]

\[ Y = 45.965 + 0.170 \times \text{Reform of financial management} \]

\[ Y = 41.028 + 0.279 \times \text{Research for education} \]

\[ Y = 37.548 + 0.349 \times \text{Internationalization} \]

From Table 6, we can see that two variables are such as C3-ReformExamination and C5-AutonomyUniversity do not have statistical significance (p ≥ 0.05). One of that relationship is demonstrated in Fig. 8 with a difference of causal effect relationship of leadership and reform of examination to education policy objective in Vietnam.
5.2.3 Multi-regression model analysis

In practice, multivariate regression is possible because there are measurable multiple correlations between a group of predictor variables and one dependent variable, coded of effectiveness of education policy. The independent variables and this dependent variable can be in one system, so we include all these independent variables into a multivariate regression model.

We can establish the multivariate regression model of the correlation among dependent variable, the effectiveness of education policy and the predictors. Of course, because of significance testing in doing a simple linear regression, they are eliminated with two variables, Reform in examination, Autonomy of universities because their $p \geq 0.05$ (Table 5). The multivariate regression model is shown in Tables 7, 8, 9 (Annex). Thus, from the single model, significant variables are used to multivariate regression model to determine how well the combination of independent variables explains the variance. In Table 6, we see the $R = 0.905$ and $R^2 = 0.819$, and adjusted $R^2 = 0.814$. Thus, we can see that the analysis accounted for 81.9% of the variance.

The analysis of variance (ANOVA) table is in Table 7, we can see that the overall analysis is significant at the $p = .000$ level. The coefficients are presented in the Table 8. The unstandardized coefficients ($c$-weights) are presented, and then the standardized or beta coefficients. Because $c$-weights reflects the actual measure with its associated mean and standard deviation, so it is not directly interpretable and beta reflects the weight associated with standardized scores on the variables. From Table 8, it is shown that all of predictors contribute significantly to the variance ($p \leq 0.05$).

Table 6. Summary of single model analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>$\beta$</th>
<th>$\alpha$</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership in policy implementation</td>
<td>0.721</td>
<td>19.179</td>
<td>0.763</td>
<td>0.582</td>
<td>.000</td>
</tr>
<tr>
<td>Educational focus on competency</td>
<td>0.457</td>
<td>28.285</td>
<td>0.566</td>
<td>0.321</td>
<td>.000</td>
</tr>
<tr>
<td>Reform in examination,</td>
<td>0.03</td>
<td>54.232</td>
<td>0.003</td>
<td>0.000</td>
<td>.959</td>
</tr>
<tr>
<td>Open education</td>
<td>-0.602</td>
<td>85.196</td>
<td>0.436</td>
<td>0.190</td>
<td>.000</td>
</tr>
<tr>
<td>Autonomy of universities</td>
<td>-0.05</td>
<td>54.694</td>
<td>0.006</td>
<td>0.000</td>
<td>.923</td>
</tr>
<tr>
<td>Lecturer development</td>
<td>0.183</td>
<td>44.751</td>
<td>0.201</td>
<td>0.041</td>
<td>.001</td>
</tr>
<tr>
<td>Reform of financial management</td>
<td>0.170</td>
<td>45.965</td>
<td>0.143</td>
<td>0.021</td>
<td>.019</td>
</tr>
<tr>
<td>Research for education</td>
<td>0.279</td>
<td>41.028</td>
<td>0.355</td>
<td>0.126</td>
<td>.000</td>
</tr>
<tr>
<td>Internationalization</td>
<td>0.349</td>
<td>37.548</td>
<td>0.246</td>
<td>0.061</td>
<td>.000</td>
</tr>
</tbody>
</table>

(Source: SPSS analysis)

Fig. 9. Difference of causal effect relationship of leadership and reform of examination to education policy objective in Vietnam
There is still one intercept constant, but each independent variable has a separate c-weight. Given a prediction equation of: \[ \text{Effectiveness of education policy} = 0.627 \times \text{Leadership} + 0.079 \times \text{Competent Development} + 0.275 \times \text{Lecturer Development} + 0.189 \times \text{Reform Finance} + 0.148 \times \text{Research for Education} + 0.277 \times \text{Internationalisation} - 0.186 \times \text{Open Education} + 15.6 \]

We can re-formulate the equation as follows:

\[
Y = 0.627C1 + 0.079C2 + 0.275C6 + 0.189C7 + 0.148C8 + 0.277C9 - 0.186C4 + 15.6
\]

In general, the correlation coefficients \( R = 0.905 \) and all 7 independent variables can be explained almost 81.4% (Adjusted \( R^2 = 0.814 \)) of the completion of education policy objective. We look at p value (last column - Sig.), we can see all of the independent variables have shown their statistical value with p < 0.05 (corresponding to the probability level is 95%).

It is based on single regression analysis, we can see that the most important independent variables for the model are such as leadership in policy implementation, education for competent development, renovation of open educational systems, enhancement of the effectiveness of research and application of science and technology in education.

**5.3 Evaluation of Policy Objective**

The implementation of education policy objective is the most important, as that we can focus the set of educational areas instead of an evaluation of the education policy objective (Item 3.4). The access of education is so good because the admission rate, enrolment rate and attendance rate are high in all regions and all educational level in Vietnam.

The equity is measured by a set of indicators which was evaluated rather good in Vietnam that is also reflected of the evaluation of policy solutions (Item 5). However, the relevance of curriculum and external efficiency are not so good enough, and the relation of cost per financing is low as education expenditure is so high in comparing to a percentage of GDP, but the education quality is not so high, while the internal efficiency rated the average (Table 10).

Based on the overall objective of education policy was set up in Resolution No. 29-NQ/TW) such as follows: "Create new fundamental changes, strong quality and efficiency of education to meet the needs of nation development, nation defense, studying needs of the people. It educates the Vietnamese people to develop comprehensively and brings into full play of the potentials and creativity of each individual; love the family, love the country, love the people; live well and work efficiently. Develop an open education system, practical, good teaching, good study, good management to have a rational structure and mode of education in association with the development of a learning society; Ensure quality improvement conditions; standardization, modernization, democratization, socialization and international integration of the education and training system; Maintain the socialist orientation and national identity, strive to 2030, education in Vietnam reached the advanced level in region" [1]. From the evaluation, it is shown that the overall goal of education policy must be broader and clarify that education is actually the provision of educational services rather than a focus on behaviors of social actors.

By the cause-effect relation, we observed the implementation of the CPV's Resolution and national policy on education and training development in Vietnam, especially the point of view is on a confusing principle that "education is the top priority of national policy". The development and implementation of strategies, plans and programs for the development of education have not met the requirements of society [13].

From evaluation survey in Table 10, it was shown that the awareness of comprehensive education goal is not understood and properly implemented. At present, the formal and nominal policy instruments followed by the degree are slow to be implemented making the present situation became more serious. Thus, thinking subsidized heavily in education longer, limiting the ability to mobilize social resources to invest in education and training which is the most constraint in education system of Vietnam.

From the EU and the OECD experience, most of interviewees agreed that the overall objective of education policy can be changed toward as: "The provision of education services in efficient and equitable manner with high quality for all people of Vietnam". Thus, it is a high-quality, equitable and effective and efficient education characterized by the efficient use of resources as
Table 10. Qualitative evaluation on the completion of policy objective

<table>
<thead>
<tr>
<th>Areas of education</th>
<th>Contents (by a set of indicators adopted from UNESCO)</th>
<th>Qualitative Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>Admission rate, enrolment rate, attendance rate</td>
<td>Good</td>
</tr>
<tr>
<td>Equity</td>
<td>Admission rate, enrolment rate, attendance rate / ethnic minority groups</td>
<td>Rather good</td>
</tr>
<tr>
<td>Quality</td>
<td>Test score /students; cost per pupil; teachers qualification; pupil/teacher ratio; classroom ratio; quality of teaching and learning process; adequacy of teaching content</td>
<td>Not so good</td>
</tr>
<tr>
<td>Relevance of curriculum</td>
<td>Employment and unemployment rate; graduate tracer studies; admission of university graduates to graduate studies aboard; labor market feedback on job opportunities of graduate by field</td>
<td>Not so good</td>
</tr>
<tr>
<td>Internal efficiency</td>
<td>Promotion rate, repetition rate, drop out rate, survival rate, completion and graduate rate</td>
<td>Average</td>
</tr>
<tr>
<td>External efficiency</td>
<td>Rate of return to ratio</td>
<td>Not so good</td>
</tr>
<tr>
<td>Cost/ financing</td>
<td>Cost per pupil and per student, cost of educational inputs, education expenditure as % of GDP or government budget, public versus private cost</td>
<td>Low</td>
</tr>
</tbody>
</table>

(Sources: Evaluation done by in-depth interviews and discussions with reference to the annual reports and statistical data from a period of 2000-2018)

well as efficient allocation of educational resources. The educational service can build a high-quality workforce with good knowledge and human skills that contribute positively to form a strong competitive national economy [6].

As a result of the in-depth interviews, the evaluation concentrated on the education policy objective. It recognized that the policy objective is not relevant to the policy problem received attention of policy stakeholders because of a number of reasons including (i) Lacking of quality dimension; (ii) Lacking of relevance curriculum; (iii) Not focus on internal and external efficiency; (iv) Not mention about the cost/ financing; (v) The equity in education is still missing.

We can re-define it that “Overall education policy objective is to deliver high-quality, equitable and efficient education and training”. The education policy can facilitates high-quality learning for everyone with the most efficient allocation of resources between the different education systems (pre-school, schools, universities etc). The irrespective education system’s organization focuses on the contribution of education policy towards providing a skilled labor force, the graduate output of upper secondary and tertiary education, and equitable access to education. While the latter pertains to issues of fairness and distributive justice, it also has implications for a country’s international competitiveness as unequal education implies a waste of human potential.

6. DISCUSSION AND CONCLUSION

From the policy evaluation, we can conclude that the education policy implementation is not very perfect in Vietnam; especially the education policy has been under poor design. The overall objective of education policy defined in Resolution No. 29-NQ/TW is comprehensive and covering the education policy problem. If the education is considered as the top national policy, it determined strongly to reform the education system in Vietnam. However, the top national priority of policy is just a slogan “National book”, actually this is a meaningless. There is a rising a need of re-defining the education policy objective in Vietnam. Thus, the overall education policy objective should be: “Overall education policy objective in Vietnam must deliver high-quality, equitable and efficient education and training for all people”. It should be able to re-define the overall objective of education policy up to year 2030 as the education of Vietnam must be reached to the advanced level in the ASEAN region.

In the evaluation, some of policy solutions are not very well done which are not effective and efficient and relevant for education reform in Vietnam. The level of achievement of policy solutions is rather modest at medium and medium level [17]. As that results of such evaluation set out to promote better implementation of policy solutions for the education policy implementation in the future.
The single regression models were shown that the leadership in education implementation and focus on competency of learners and research for education must be going with internationalization and financial reform can explain the variance of education policy implementation in Vietnam. Also, we can see the multivariate regression model is very good to explain 81.9 % of the dependent variable, the policy objective completion and their independent variables. The independent variables are leadership in education policy, lecturer development, financial reform, research for education, internationalization, open education, competency development are all important. That’s why it should be able to concentrate on these factors, especially the leadership in education policy, lecturer development, financial reform, internationalization which can be generalized for education policy in developing countries.

The research also calls for a continuous efforts to concentrate on specific education policy instruments of education policy in order to include the smart policy choices at the right time.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES

4. Education Strategy 2011-2020 (Decision 711 / QD-TTg).
5. Kitamura Y. Education indicators to examine the policy making process in the education sector of developing countries. Discussion paper 170. Graduate School of International Development. Nagoya University; 2009.
16. Preliminary Report on the Five Year Implementation of Resolution No. 29-NQ /TW of the 11th Central Committee on "Basic and comprehensive reform of education and training to meet the requirements of industrialization and modernization in the context of socialist-oriented market economy and international integration".
17. Vietnam Union of Science and Technology Associations, The proposal proposes a number of measures to progressively and thoroughly reform Vietnam’s education system; 2005.
ANNEX: Tables of Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.763[^a]</td>
<td>.582</td>
<td>.580</td>
<td>6.74812</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), C1.Leadership

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
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<td>1</td>
<td>16652.070</td>
<td>365.681</td>
<td>.000[^a]</td>
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<tr>
<td>Residual</td>
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<td>263</td>
<td>45.537</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28628.340</td>
<td>264</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. Predictors: (Constant), C1.Leadership

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>19.179</td>
<td>1.889</td>
<td></td>
<td>10.155</td>
</tr>
<tr>
<td>C1.Leadership</td>
<td>.721</td>
<td>.038</td>
<td>.763</td>
<td>19.123</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.905[^a]</td>
<td>.819</td>
<td>.814</td>
<td>4.49089</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
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<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
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<td>1 Regression</td>
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<td>7</td>
<td>3349.307</td>
<td>166.070</td>
<td>.000[^a]</td>
</tr>
<tr>
<td>Residual</td>
<td>5183.190</td>
<td>257</td>
<td>20.168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>28628.340</td>
<td>264</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Table 9. Coefficients^a

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
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<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-15.60</td>
<td>4.625</td>
<td></td>
<td>-3.373</td>
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<td>C1.Leadership</td>
<td>.627</td>
<td>.032</td>
<td>.663</td>
<td>19.636</td>
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<tr>
<td>C2.CompetentDevelopment</td>
<td>.079</td>
<td>.031</td>
<td>.098</td>
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<td>C6.LecturerDevelopment</td>
<td>.275</td>
<td>.026</td>
<td>.302</td>
<td>10.622</td>
</tr>
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<td>C7.ReformFinance</td>
<td>.189</td>
<td>.044</td>
<td>.160</td>
<td>4.313</td>
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<td>C8.ResearchForEducation</td>
<td>.148</td>
<td>.024</td>
<td>.189</td>
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<tr>
<td>C9.Internationalisation</td>
<td>.277</td>
<td>.046</td>
<td>.195</td>
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</tr>
<tr>
<td>C4.OpenEducation</td>
<td>-.186</td>
<td>.044</td>
<td>-.135</td>
<td>4.234</td>
</tr>
</tbody>
</table>

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