Research article

The Role and Effectiveness of Education Administration in Developing Institutions of Higher Education in the Digital Era

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Abstract.
Educational administration is a combination of two words – "administration" and "Education" – each word has its own meaning and when combined forms a new meaning. The essence of education administration is the application of administrative science in the world of education or coaching and development and control of educational practice business. This research was conducted to see the effectiveness and the role of education administration in the development of educational institutions in the current digital era. The research was conducted in 2020 using a mixed-method (qualitative and quantitative) at one of the Higher Education Institutions in Palembang City, South Sumatra, namely PGRI Palembang University.

Keywords: education administration, higher education, effectiveness, digital era

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1. Introduction

Educational administration operation is still neglected in perfecting the quality of education. There are still numerous educational institutions that pay lower attention to executive operation. This makes educational institutions also like buses that are controlled without any definite rules and pretensions. It should be understood that one of the critical aspects to be carried out in order to ameliorate the quality of education is the actuality of good executive operation for both preceptors and education staff. This capacity structure will have a positive and effective impact on perfecting the quality of educational institutions. Good executive operation is one of a series of sweats to ameliorate the quality of education. Guidance and development of professional capacities of preceptors and education staff that's carried out in a quality manner through perfecting good education administration will be suitable to ameliorate the quality of educational institutions. Thus, perfecting the quality of education, one of which is veritably dependent on the operation of education administration. The development of technology and information in the period of the artificial revolution 4.0 which is growing so presto has a huge impact on the characteristics of the current job, where

chops and capabilities are the main effects that need attention. Because in the period of the artificial revolution 4.0, the integration of the use of technology and the internet which is so sophisticated and massive, also greatly influences changes in the geste of the business world and the artificial world, the geste of society and consumers in general.

The characteristics of the artificial revolution period include digitalization, product optimization and cutomization, robotization and adaption, commerce between humans and machines, value added services and business, automatic data exchange and communication, and the use of information technology. Thus, the world of education and assiduity must be suitable to develop artificial metamorphosis strategies by considering the mortal resource sector that has capability in their field.

There are 4 driving factors for digital transformation. These factors are: (1) regulatory changes, (2) changes in the competitive landscape, (3) shift/change to digital form of industry, (4) changes in consumer behavior and expectations [1]. Information technology and digital media in digital transformation in society have provided various benefits, such as: (1) increasing convenience in an activity, (2) reducing dependence and constraints related to location, (3) Increasing the availability of information, (4) allowing instant communication over long distances much, (5) speeding up the processing time of an activity.

The above benefits only have value if they are carried out in one direction. When it comes to digital transformation for universities, the direction needed is today's higher education goals. If this is clear, then information technology is included in the educational paradigm. Without clear and correct directions, the use of technology will not be optimal. Conflicts with existing academic or administrative systems or procedures are inevitable. The result is that the potential of technology cannot be released as expected. Users, in this case the academic community of universities, become antipathy to the technological innovations that are applied. They will prefer conventional methods because technology is considered unable to meet their needs. Almost all Institutions of advanced literacy have described themselves individually, but they still remain institutions. There are those institutions that have had their history and tradition for hundreds of times. This makes the staff (top directors, academic, and support) have the veritably same academic system and the same experience of client service; which has come an adequate standard for those very institutions [2]. For example, universities create e-learning websites for students and the content has been provided according to the curriculum. If the lecturer is not guided by the material in the e-learning and continues to provide assignments, teaching materials, or exams only based on reference books

that he has used for a long time, then students do not feel the need to access e-learning. In other cases, campus administration employees are provided with campus administration system software. If the bureaucratic system is not adapted to the use of the software, for example it always requires a physical signature for document validation, then the benefits of reducing the length of the bureaucratic process and saving on paper usage will be less pronounced. Therefore, the problems to be solved with information technology need to be understood first. In other words, we need to understand the challenges of higher education today and build the right mindset to face these challenges through the use of technology with the intent and purpose of one of which is to look at the level of effectiveness and also evaluate as a function of education administration namely: (1) knowing the results of organizational performance in educational institutions, (2) knowing and understanding how the performance of each personnel, (3) knowing the obstacles faced in one period so that it no longer occurs in the next period, (4) Instilling the spirit of work for the personnel in order to realize the ideals of the organization [3].

In addition, the purpose of governance and effectiveness of the administration is in order to achieve the ideals of education. This means that the administration of education has a central role as a form of effort in achieving the goals of educational institutions. It is said that there are four administrative objectives, including: (1) performance effectiveness in order to obtain effective and efficient outputs., (2) efficiency in work, (3) adaptation, (4) job satisfaction [4].

Along with the development of globalization and the industrial revolution 4.0, all Universities experience obstacles in the process of implementing education administration which is accompanied by the development of the digital era, so that the use of information technology is seen only as a trend. For example, sometimes universities only build websites or only provide free Wi-Fi for students without providing special content relevant to learning. The procurement of information technology facilities and infrastructure is not just a prestige or a minimum standard that must exist without considering its purpose. Ideally, universities really understand the problems of education today and present information technology as a solution so that they can carry out digital transformation. Digital transformation in the scope of higher education does not only mean building digital infrastructure. But more than that, digital transformation is the construction of facilities and changing mindsets aimed at meeting the growing needs of students and other academics in building a connected learning environment. It can be implemented by combining technology, services and security systems, which can create a collaborative, interactive and impersonal learning experience. Digital transformation,

as mentioned a little at the beginning of this article, can be interpreted as a process of utilizing existing digital technologies such as virtualization technology, mobile computing, cloud computing, integration of all existing systems in the organization and so on [5]. Therefore, this study intends to explain the problem of the role and effectiveness of implementing educational administration in higher education in the current digital era.

2. Methodology

This study uses research that combines quantitative and qualitative approaches (mixed method). The quantitative approach is used to measure the data on the effectiveness of the role of the education administration in a university, while the qualitative approach is used to analyze the data on the effectiveness of the role of the education administration [6]. That is, qualitative serves as a method to support the external validity of the quantitative data. Quantitative data analysis technique is by distributing questionnaires using a Likert scale with 5 categories, namely: (1) score 5 for the very effective answer category, (2) score 4 for the effective answer category, (3) score 3 for the answer category quite effective, (4) score 2 for the ineffective answer category, (5) score 1 for the very ineffective answer category. While qualitative data were obtained from observations, literature studies and interviews and processed into words, sentences, schemes or pictures. Qualitative analysis technique is carried out by analyzing the results of observations, quantitative data with the aim of showing or explaining the effectiveness of the educational administration role of one of the universities in Palembang City, Indonesia (PGRI Palembang University).

The population in this study The sample in this study was 25 Lecturers with the technique of determining the sample, namely simple random sampling.. The questionnaire given to the sample describes 4 approaches to effectiveness an indicator of Educational administration governance, namely Goal Attainment (measures how far/effective the objectives of the role of Education administration are, namely the curriculum that has been implemented). System (Measuring the availability of resources (Educators/Lecturers, education staff, students) as an organism and seeing its relationship with the external environment), strategic constituencies (measuring the level of satisfaction of key constituents) and competing values (measuring success criteria with educational administrative factors, namely educational facilities). and infrastructure, finance and environment) [7].

3. Result

3.1. Goal Attainment Score

TABLE 1: Goal Attainment Score.

Very Effective	Effective	Quite Effective	Ineffective	Very Inffective
6	16	3	-	-

From the results of the data for measuring how far/effective the objectives of the role of the Education administration are, namely the curriculum that has been implemented, for the curriculum implemented in the Odd Semester of the Academic Year 2020/2021 is the Indonesian National Qualifications Framework, hereinafter abbreviated as KKNI, is competency qualification framework that can juxtapose, equalize and integrate the fields of education and job training as well as work experience in order to provide recognition of work competencies in accordance with the work structure in various sectors. From the data results 6 people (24%) stated that the current curriculum This has been used very effectively, while 16 people (64%) said it was effective while the remaining 3 people (12%) said it was quite effective. In relation to the role of education administration carried out at PGRI Palembang University, seen from the Goal Attainment dimension, it can be said that the implementation of education administration from the current curriculum has been effective.

3.2. System Score

TABLE 2: System Score.

Very Effective	Effective	Quite Effective	Ineffective	Very Inffective
2	16	7	-	-

From the results of the data for measuring how far/effective the objectives of the educational administration role are from the System dimension, namely measuring the availability of resources (Educators/Lecturers, education staff, students. From the data results 2 people (0.08%) stated that Availability of Resources The power currently used is very effective, while 16 people (64%) said it was effective, while the remaining 7 people (28%) said it was quite effective.Related to the role of education administration carried out at PGRI Palembang University, seen from the Dimensions of Goal Attainment, it can

be said that the implementation of Education administration from the current curriculum has been effective

3.3. Strategic Constituencies Score

TABLE 3: Strategic Constituencies Score.

Very Effective	Effective	Quite Effective	Ineffective	Very Inffective
	20	5	-	-

From the data results to measure how far/effective the goal of the role of education administration is, namely measuring strategic constituencies (measuring the level of satisfaction ofconstituents key). From the results of these data 20 people (80%) said it was effective while the remaining 5 people (20%) said it was quite effective. Related to the role of education administration carried out at PGRI Palembang University, seen from the strategic constituencies dimension, it can be said that the implementation of education administration from the level of satisfaction of key constituents has been effective.

3.4. Competing Score

TABLE 4: Competing Score.

Very Effective	Effective	Quite Effective	Ineffective	Very Inffective
	10	15	-	-

From the results of the data for measuring how far/effective the objectives of the role of the education administration are, it is measured by competing values (measuring the criteria for success with education administration factors, namely facilities and infrastructure, finance and environment). From the results of these data 10 people (40%) stated that the facilities and infrastructure, finance and the environment that were currently used were effective, while 15 people (60%) stated that they were quite effective. In relation to the role of education administration carried out at PGRI Palembang University, seen from the Competing Values Dimension, it can be said that the implementation of Educational administration from the current curriculum is quite effective.

4. Discussion

4.1. Goal Attainment

From the results of the measurement data, how far/effective is the goal of the role of education administration namely the curriculum that has been implemented, for the curriculum that is implemented, namely the curriculum with the name of the Indonesian National Qualifications Framework (KKNI) it can be concluded that it has been effective. Curriculum has various meanings both between countries and between institutions education providers. This is due to different interpretations of curriculum, which can be viewed as a plan made by a person or as an actual event or effect of a series of events [8]. Based on the Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 49 2014 concerning the National Standards for Higher Education, the curriculum is a set of plans and arrangements regarding graduate learning outcomes, study materials, processes, and assessments which is used as a guideline for the implementation of the study program [9]. At the end of each academic year, a year end student survey was administered to the funded research students where they were asked for their highest educational goal. In accordance with the the results of research conducted with questionnaires that have been distributed can be said that for the role of education administration, namely the curriculum that has been implemented has been effective, because has played a significant role in the development of higher education, although currently there is a change in the Merdeka Campus Curriculum which is currently in the implementation phase in various universities in Indonesia. Fulfillment of study period and load for undergraduate or applied undergraduate program students can be implemented: (1) following the entire learning process in the study program at tertiary institutions according to the period and study load; and (2) following the learning process inside study program to fulfill part of the study period and load and the rest follow the process learning outside the study program. At a glance, this new curriculum states that through Merdeka Learning – Merdeka Campus, students have the opportunity to one semester or equivalent to 20 credits of studying outside the study program at the same College; and a maximum of two semesters or equivalent to 40 credits of studying in the same study program at the University different, learning in different study programs at different universities different; and/or learning outside of Higher Education.

4.2. System

From the results of measuring data how far/effective the goal of the role of education administration is, measuring the availability of resources (Educators/Lecturers, education staff, students) shows dominant results for the effective category. Availability of resources (Educators/Lecturers, education staff, students. From the results of these data 2 people (0.08%) stated that the Availability of Resources currently used was very effective, while 16 people (64%) stated it was effective while the remaining 7 people (28%) stated that it was quite effective. The management of personnel, both educators, education staff, or administrative staff, judging from the conditions in the field was indeed quite effective, the administrative management process for education personnel had been managed with various conveniences from the process of submitting a promotion (academic functional level of lecturers) through the "SIKITO" application on thewebsite page https://sikito.lldikti2.id/ , managing the utilization of academic administration, finance that has been made on thewebsite page https://sisfo.univpgri-palembang.ac.id"and managing the integration of the resource system on the website page http://sister.univpgri-palembang.ac.id/auth/login. The website gives study nts opportunity to participate in the content and education activities as they become active participants in learning, positively influencing their performance [10]. The standard output depends on how good input is and the quality control of the process by the educational institutions [2]. It can be concluded that in relation to the role of education administration carried out at the University of PGRI Palembang which is seen from the System Dimension and seeing the quality of the existing and current inputs that are currently being implemented , even from the results of interviews with lecturers it is said that there are conveniences and applications made digitally. related to the management function of the existing system, it is very good, because for several private universities in South Sumatra, only PGRI Palembang University has a digitally integrated website page to facilitate the management of education administration for lecturers, administrative staff, employees and even students. So from the results of the questionnaire data and observations as well as interviews conducted, it can be concluded that the role of education administration carried out at the University of PGRI Palembang as seen from the Dimensional System that is currently being implemented is very effective.

4.3. Strategic Constituencies

From the results of the data for measuring how far/effective the objectives of the education administration role are, namely measuring strategic constituencies (measuring the level of satisfaction of key constituents). From the results of these data 20 people (80%) said it was effective while the remaining 5 people (20%) said it was quite effective. Related to the role of education administration carried out at PGRI Palembang University, seen from the strategic constituencies dimension, it can be said that the implementation of education administration from the level of satisfaction of key constituents has been effective. That an effective organization or Higher Education Institution is an organization that meets the demands of important parts of the environment, its constituents, from which it needs support for its sustainability and is able to meet different strategic constituencies (or interest groups). Strategic constituents and in this case are lecturers, administrative staff, owners of university foundations, government and society. From the data and the results of interviews conducted with lecturers, it was said that the implementation of the education administration carried out was in the right category regarding their satisfaction with higher education institutions, in addition to interviews conducted with one of the staff from the Government, in this case LLDikti region 2, that A good university, one of which is the PGRI Palembang University, is enough to become a private university that has shown rapid progress, even holding the INCOePP International Seminar on January 26, 2021 (https://incoepp.univpgri-palembang.ac.id) so it can be concluded that the role of education administration carried out at the University of PGRI Palembang seen from the strategic constituencies dimension that is currently being carried out is to make the organization effective.

4.4. Competing Values

From the data results for measuring how far/effective the objectives of the educational administration role are, it is measured by competing values (measuring success criteria with education administration factors, namely facilities and infrastructure, finance and environment). From the results of these data 10 people (40%) stated that the facilities and infrastructure, finance and environment that are currently being used are effective, while 15 people (60%) stated that they were less effective. Related to the role of education administration carried out at PGRI Palembang University as seen from the Competing Values dimension, it can be said that the implementation of the education administration of the current curriculum is quite effective. Based on the results of

interviews conducted with Lecturers at the University of PGRI Palembang, it is said that the existing shortcomings as educational administrative facilities in teaching and learning activities are actually quite good, but there needs to be an increase in funding for research carried out by the University as well as the development of digital facilities (increasing bands). with) for teaching and learning activities. Perhaps the limitation of focusing on a founded program a single university would be addressed by future research efforts, focusing on a similar program at meaningfull institutions of highest education [11]. So it can be concluded that it can be concluded that the role of education administration carried out at the University of PGRI Palembang which is seen from the strategic constituencies dimension that is currently being carried out is to make the organization quite effective.

5. Conclussion

Overall the effectiveness of the implementation of education administration is effective in the role of education administration in the digital era. In relation to the use of IT in higher education learning in the digital era, all universities should be and be able to make changes and developments in the digital era by prioritizing innovation and improving the quality of higher education starting from the implementation of education administration (curriculum, teaching and learning activities, staffing (lecturers) , facilities and infrastructure, finance, and environment).

Authors' Contributions

This study contributes to the existing literature by carrying out the effectiveness of the role of education administration in relation to the use of IT in higher education learning in the digital era. So that Higher Education needs to make changes and developments in the digital era by prioritizing innovation and improving the quality of higher education.

References

[1] K. Osmundsen, J. Iden, and B. Bygstad, "Digital Transformation: Drivers, Success Factors, and Implications.," In: *MCIS 2018 Proceedings*. pp. 1–15. *Association Management Software*, Corfu, Greece (2018).

[2] Wahab S. The implication of customer service in higher education. International Journal of Education and Practice. 2016;4(3):106-11.

[3] Soetjipto S, Kosasi R. Teaching profession. Jakarta: Rineka Cipta; 1999.

[4] Burhanuddin B. Educational administration. 2005.

[5] Loonam J, Eaves S, Kumar V, Parry G. Towards digital transformation: Lessons learned from traditional organizations. Strategic Change. 2018;27(2):101-9.

[6] V.L.. Creswell, J.W., Clark, "Designing & conducting mixed methods research + the mixed methods reader.," *Designing & conducting mixed methods research + the mixed methods reader*. vol. 1, no. 2, pp. 24–27, 2017

[7] Keban YT. Six strategic dimensions of public administration: Concepts, theories and issues. Yogyakarta: Gava Media; 2004.

[8] Johnson M. Internationality in education. New York: Center for Curriculum Research and Services; 1977.

[9] Minister of Education and Culture of the Republic of Indonesia. Peraturan menteri pendidikan dan kebudayaan Republik Indonesia nomor 49 tahun 2014 tentang standar nasional pendidikan tinggi. Jakarta: Kementerian Pendidikan dan Kebudayaan Republik Indonesia, 2014

[10] Aljraiwi S. Effectiveness of gamification of web-based learning in improving academic achievement and creative thinking among primary school students. International Journal of Education and Practice. 2019;7(3):242-57.

[11] Slovacek S, Miu V, Soto K, Ye H. Supporting STEM in higher education. International Journal of Education and Practice. 2019;7(4):438-49.