

# Portfolio-Based Online Induction Model: Its Effect on Principal's Instructional Leadership

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## ABSTRACT

In the midst of the pressure COVID-19 pandemic in the digital era, the use of ICT has become a necessity. Therefore, it is necessary to develop a principal induction program that can be done online that can be accessed anytime and anywhere. This study aims to determine the effect of principals' portfolio-based online induction on principal's instructional leadership. This research was conducted with a quantitative approach. Data analysis was carried out, namely descriptive analysis and simple regression analysis, with the help of IBM SPSS Statistics 24. The results showed that the development of principals' portfolio-based online induction using website media, can improve the learning leadership skills of school principals. The principal's online induction program helps beginner principals access the various information they need to lead schools.

**Keywords:** *Online induction program, Instructional leadership, Principal, Digital age.*

## 1. INTRODUCTION

Undoubtedly, the principal plays a very important role in creating an effective school. As leaders of educational institutions, principals have a tough task, because as leaders they are required to understand leadership theories and skillfully apply these theories in practical situations in their workplace [1][2]. The principal's main attention should be to maintain and develop an effective educational program in their school and to promote the improvement of learning activities in their school [3]–[5]. The principal's role is to provide leadership, direction and coordination in the school. Principals should strive to create an organization and climate that encourages student and teacher growth. The principal's duties are comprehensive because all aspects of school operations, both directly and indirectly, are under his jurisdiction.

The government in this case the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia as a policy maker related to education, it is important to develop policies that support the professional development of school principals. The professional development of principals is a lifelong process that begins at the beginning of training to become

a prospective principal and ends at retirement [6]. Generally, this lifelong process is divided into certain stages. The Association of Washington Principals [7] explains, the first stage concerns the preparation of teachers in the early days of education as principals (training prospective principals), where those who want or meet the requirements to become principals are equipped with basic skills and knowledge. The second stage is the first step of being independent as a beginner principal, the first years of confrontation with the reality of being a principal in a new school environment. This phase is generally called the induction phase. The third phase is the continuous professional development phase of principals who have overcome the initial challenges of becoming a principal. All principals will go through these phases. However, the quality of their development will largely depend on the support provided to them in each of these phases [8].

In recent years much attention has been paid to the quality of principal education or training programs and the conditions for effective programs for continuing professional development [9], [10]. Lack of attention is paid to the design of effective induction programs that support principals in transitioning the work of a teacher to being a principal in a new environment. The principal

when entering a new environment will experience some obstacles, either because the practice or the situation and procedures are different from the previous school [11], [12]. For novice principals, the induction program is important, because the principal will have the knowledge and skills in carrying out his duties and roles as principals [13].

The digital era as it is today, coupled with the pressure of the COVID-19 pandemic, the use of ICT has become a necessity. Therefore, it is necessary to develop a principal induction program that can be done online that can be accessed anytime and anywhere. The development of an induction model for school principals has been carried out by researchers, the development carried out is making a website, which can be used by principals as an alternative medium to carry out the online induction program [14]. The website of principal's induction program can be accessed on the nusantarastrategis.or.id page. The website contains material that is very important for principals in leading their schools towards effective and adaptive schools to changes and developments in technology and science, namely educational leadership, instructional and educational supervision, educational management, principals professionalism, school organization development and instructional leadership [14]. This study aims to determine the effect of the principal's portfolio-based online induction on the principal's instructional leadership.

## 2. METHOD

This research was conducted with a quantitative approach. The variables studied were: principals' portfolio-based online induction as the independent variable (X) and principal's instructional leadership (Y) as the dependent variable. The respondents of this study were 145 principals of elementary schools in Malang Regency, East Java, Indonesia. The data collection technique in this study used a closed questionnaire technique. The principals' portfolio-based online induction variable indicators are, (1) school program planning, (2) human resources, (3) learning quality, (4) school culture, (5) community support, (6) ICT utilization, and (7) evaluation and follow-up of school programs. Meanwhile, the principal's instructional leadership variable indicators are, (1) the vision, mission, and objectives of the school, (2) the school's flagship program, (3) the development of a new learning culture in schools, (4) the development of a conducive learning environment, (5) community support in supporting learning programs, and (6) efforts to ensure the successful implementation of learning programs. Data analysis was carried out namely descriptive analysis and simple regression analysis, with the help of SPSS 24.0 [15], [16].

## 3. RESULTS

### 3.1. Data Description

The data description in this study was obtained through a questionnaire filled out by 145 respondents from elementary school principals. In detail, based on Table 1. it can be explained that the level of principals' portfolio-based online induction obtained as many as 86.2% or 125 principals are in the excellent category, and 13.8% or 20 principals are in the good category. So it can be stated that principals' portfolio-based online induction is seen from school program planning, school human resources, quality of learning, school culture, community support, ICT utilization, and evaluation and follow-up of school programs are included in the excellent category. Based on Table 1. it can be explained that the level of principal's instructional leadership obtained as much as 69.0% or 100 principals are in the excellent category, and 31.0% or 45 principals are in the good category. Then it can be stated that principal's instructional leadership is seen from a) the vision, mission, and objectives of the school, b) the school's flagship program, c) the development of a new learning culture in schools, d) the development of a conducive learning environment, e) community support in supporting learning programs, and f) efforts to ensure the successful implementation of learning programs are included in the excellent category. In detail the frequency distribution, and the percentage of research variables can be seen in Table 1.

### 3.2. Data Assumption

Before performing regression analysis, the data must first meet the assumptions of normal, homogeneous, linear and multicollinearity. The first assumption test, namely, normality test using Kolmogorov-Smirnov, obtained the asymp value. sig. variable, principals' portfolio-based online induction (X) = 0.193; and principal's instructional leadership (Y) = 0.097. These results show the asymp value. sig. > 0.05 then the data is declared normally distributed. Homogeneity test with Homogeneity of Variance Test obtained asymp value. sig. variables: principals' portfolio-based online induction (X) = 0.003; and principal's instructional leadership (Y) = 0.021. These results show the asymp value. sig. < 0.05 then the data is declared to come from homogeneous data. Linearity test with Curve Estimation Test obtained asymp value. sig. variable relation: principals' portfolio-based online induction (X) to principal's instructional leadership (Y) = 0.000. Based on the results of the analysis, it is known that the probability value is < 0.05, so it can be stated that the relationship between research variables is linear. Multicollinearity test with Variance Inflating Factor (VIF) value obtained variable VIF: principals' portfolio-based online induction (X) = 1.383; and principal's instructional leadership (Y) = 2,516. Based on the VIF value of the research variable is less than 10. So it can be stated that the data from these

variables comes from a population that is free from multicollinearity cases.

### 3.3. Regression Analysis

The hypothesis being tested is that there is a significant effect of principals' portfolio-based online induction (X) on principal's instructional leadership (Y). Table 2. shows the results of the regression analysis of principals' portfolio-based online induction on principal's instructional leadership. Based on Table 1, it is known

that the significance value is  $0.000 < 0.050$  so that  $H_0$  is rejected, it can be stated that there is a significant effect of principals' portfolio-based online induction on principal's instructional leadership. The regression coefficient of principals' portfolio-based online induction on principal's instructional leadership is 0.819. Based on the results of the regression analysis that has been carried out, it is known that there is a significant effect of principals' portfolio-based online induction on principal's instructional leadership, with a large effect of 67.1% ( $RSquare \times 100 = 0.671 \times 100 = 67.1\%$ ).

**Table 1.** Data Description

Variable	Interval	Category	f	%
Principals' portfolio-based online induction	78 - 96	Excellent	125	86.2%
	60 - 77	Good	20	13.8%
	42 - 59	Inadequate	0	0.0%
	24 - 41	Adequate	0	0.0%
Principal's instructional leadership	47 - 57	Excellent	100	69.0%
	36 - 46	Good	45	31.0%
	25 - 35	Inadequate	0	0.0%
	14 - 24	Adequate	0	0.0%

Note: n = 145

**Table 2.** Regression Analysis of Principals' Portfolio-Based Online Induction on Principal's Instructional Leadership

R	R Square	Sum of Squares	df	Mean Squares	t	sig.
.819	.671	2669.881	1	2669.881	17.067	.000
			144			

## 4. DISCUSSION

Previous studies have shown that leadership development can contribute to shaping the performance of a principal [17]–[19]. Most countries have developed programs and options targeting different stages of principals leadership, from initial pre-service training through induction programs to in-service provision [10], [12]. Leadership development is broader than a specific program of activities or interventions and can be carried out through a combination of formal and informal processes across all stages and contexts of leadership practice [18].

Novice principals are currently enveloped by increasing anxiety due to the pressures of the Covid-19 pandemic, this is understandable because new leaders enter new roles and require many adjustments including basic skills in leading a school [20], [21]. Principals today require a very sophisticated combination of knowledge, skills, and attributes needed to face constant and rapid economic, social, educational changes, and ICT. this requires continuous improvement [22]. To assist beginner principals, an induction program model is needed that can provide them with the skills they need to

develop [23], [24]. Based on the research results, there is a significant effect of principals' portfolio-based online induction on principal's instructional leadership. Successful principal induction programs help school leaders develop their leadership strengths, build new professional networks and build their capacity to lead with confidence [25], [26].

The development of principals' portfolio-based online induction using website media, based on research results, can improve principals' learning leadership skills. The benefits of the principal's online induction program are [14]: (a) media to prepare novice principals to become professional principals, (b) media for novice principals to improve competence and (c) information media for principals. beginner school. There is no denying that the Internet has changed the course of education in recent years. This enables more open and faster access to information and communication for everyone. Principals must find ways to change the education system in schools so that students and teachers can take advantage of this rapid digital development [27], [28]. The success of schools in the face of such massive change depends on how principals handle the basics of education delivery in their schools and how this digital age demands a change

in mindsets about schooling, learning, teaching, and assessment [29], [30].

Principal's online induction program helps beginner principals to access the information they need to lead schools [2]. Since technology has become a constant part of our lives, online educational tools are a great way to help beginner principals become professional principals. The use of ICT in the principal's induction program helps the principal in accessing the information he needs anywhere and anytime. The online principal's induction program can improve the leadership skills of the principal because, the implementation of principals online induction program aims to guide beginner principals to [14]: (a) carry out their duties as professional principals, and (b) adapting to the new school culture and work climate. In dealing with a new culture and environment at school that may be very different from the previous school, the principal needs an induction program to overcome it.

The most useful thing that can be done in a principal induction program is to involve beginner principals in this digital ecosystem by providing them with a ICT-enhanced learning experience [18], [31]. This can be done through the use of websites that can be accessed anytime using the internet. Principals have always played an important role in instructional activities, responding to the obstacles and needs of the school community in the larger context of curricular, technological and pedagogical changes. Principals in today's digital age must continue to identify and model best practices, change school culture and build and maintain appropriate structures to support sustainable learning for teachers and students [32], [33]. New opportunities are present in the digital age for school leadership, not least with the increasing affordability of free and inexpensive technology tools that are now the norm. [34]. Principals can direct educators to use ICT tools to build and manage highly personalized online networks and information relevant to classroom learning needs [29], [35].

When faced with challenges and opportunities in the digital age, the capacity of any instructional leader is arguably an important factor shaping the development of their school. The complexity of the school environment in the digital age is changing the nature of leadership, which requires being able to connect student learning opportunities in different contexts and ways [36]. Various school outcomes are influenced by effective school principals, through effective allocation of resources; the development of organization structures to support learning activities; and the ability to identify and articulate the school's vision, mission and goals [37], [38]. Principals as learning leaders require five main responsibilities, namely [39]: (1) Manage people, data and processes to drive school progress; (2) Cultivate leadership in others; (3) Creating a friendly climate for education so as to create a sense of security, a spirit of

mutual cooperation, and other useful basis for interaction; (4) Establish a vision of academic success for all students based on high standards; and (5) Improving teaching to enable teachers to teach at their best and students to learn to the fullest.

## 5. CONCLUSION

The development of principals' portfolio-based online induction using website media, based on research results, can improve principals' learning leadership skills. The use of ICT in the principal's induction program helps the principal in accessing the information he needs anywhere and anytime. The most useful thing that can be done in a principal induction program is to involve beginner principals in this digital ecosystem by providing them with a technology-enhanced learning experience.

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