



Educational Administration Management in Supporting English Teacher Skills in the Digital Era in Makassar City

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Abstract: This research focuses on exploring the aspects of educational administration management for enhancing the use of English teachers' digital literacy in Makassar City which becomes indispensable in the digital age. Based on a quantitative approach of the study, it explores the effects of administrative support, professional development programs, resources and leadership on the capability of the teachers to include technological tools in their teaching practices. Primary data were obtained in structured questionnaires from 150 English teachers and signification tests such as correlation and regression have been performed to find the significance level of different factors. The study also addresses some of the missing gaps within existing literature by establishing how educational administration supports skill development in the use of technology among the populace in the developing world. These results stress the need for a broad administrative perspective, calling for the professional growth of teachers and the supply of adequate materials for their Further, the results of the present study indicate the necessity of developing consistent theoretical and methodological support for teachers based on professional development perspectives and appropriate resource supply in order to overcome the challenges of teaching in the digital age. The study has a number of essential implications for educational policymakers and school managers who are in the process of searching for ways to develop teachers' digital literacy in the contexts, which are characterized by a rather limited availability of technologies.

Keywords: Educational administration, digital skills, English teachers, Professional development, Makassar City.

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1. Introduction

Fast advances in information technologies have been felt in education especially in the teaching and learning of English as a foreign language. Due to the current development where the educational system has taken the center stage of technological advancement, the administration of education has assumed new dimensions where the major task of the administration is to help the teachers to meet the new technological challenges. The following are some of the benefits of Engaging Pre-service Teachers' Use of Technology: In Makassar City English is an important subject in the academic curriculum, the need to equip and maintain the teachers with digital skills in teaching English for quality education is a must. Teachers' on-going process of integrating information communication technologies for the enhancement of instructional practices helps in increasing students' learning accomplishment. Hence, the place of educational administration for enhancing English teachers' construction of digital literacy and technological proficiency is a significant concern of contemporary educational settings.

Educational administration management entails the provision of leadership and management in the administration of educational organisations. This management has a crucial part in creating the cultural context to enhance teacher learning in dynamic domains where learning continues to be accumulating, for

instance, the use of information technology [1]. With regards to EFL, school leaders are expected to ensure that teachers receive the appropriate support, development as well as policies, which would help them to incorporate ICTs in their instructional practice [2]. This support is important as instructors require direction and practical assistance with the various innovations to enhance on their teaching or they may end up harming the classroom learning experiences that the technologies seek to address [3].

In Indonesia and especially Makassar City, educational administration management to support teachers has recently been an increasing interest focusing on the application of the digital aspects of educational management [4]. Despite the fact that all the teachers surveyed express a desire to incorporate new technologies into their teaching, English teachers' integration process is different from that of teachers of other subjects because of the language-specific nature of their material. language learning entails the incorporation of multimedia, interactive applications, and online platforms which can develop students listening, speaking, reading and writing skills [5]. Still, many teachers in Makassar City may not have adequate knowledge and skills to deploy these resources in the classroom and this is where the educational administration comes in [6].

Another important competency focus on the teachers' digital literacy because they have to use technologies effectively to support teaching and learning. teachers' digital literacy can be defined as the understanding on how, when and why to use digital tools and knowledge on supporting students' learning through teaching with technology. In ELT this can for instance refer to practising language through technology means, multimedia for listening comprehension and interactive applications to enhance grammar/vocabulary exercises. However, if such skills have to be developed, it usually demands professional development as well as availability of resources which are usually provided by school administrators according to [7].

As mentioned earlier, the leaders with effective educational administration management have been found to boost teachers' digital competencies by offering effective professional development, promoting effective learning environment that incorporates the use of digital technologies, and by availing the tools used in learning [8]. It turns that educational administrators are required to establish policies and practices that promote the teachers' use of technology in Makassar City. This includes the creation of workshops, training sessions as well as collaborative learning where the teachers are able to exchange views or even teach each other on the best ways they think effective e-learning can be done. Furthermore, administrators are also involved in advocating for the financial support for the acquisition of the necessary digital resources and technologies that the teachers can then use to support teaching and learning digital strategies. However, there are many barriers to adopting use of affordances that teachers and administrator in Makassar City face in the provision of English language teaching. One of the current key issues is the deficiency of sufficient digital resources: computers, Internet connection, and other digital resources, including teaching materials. In absence of these resources teachers might struggle to integrate the IT in their teaching and learning process despite the training that they receive in regards to the use of the IT. This stresses the fact that educational administration should focus its resources to enhance the technological environment of schools.

One of the difficulties is that of change that tends to occur when integrating new technologies into a classroom. Teachers who were trained and used to traditional teaching may not embrace the use of the digital tools especially if they deem that they will have to change how they teach. This issue can be resolved by the educational administrators ensure that the teachers are encouraged to try new technologies and also they are provided with all the necessary help to overcome any problem as they try out the technologies. This entails providing the teachers with professional development as well as mentoring programmes that support the teachers in the acquisition of confidence while using the technology.

However, there is another problem, namely, how to enhance the motivation of the teachers while experiencing new waves of demands with use of IT technologies. As it has been observed. along with thousands of English teachers in the Makassar City and other parts of the world, they are all under immense pressure from the need to modernize their abilities and master new technologies. Leadership in educational administration management is central to the process of sustaining motivation for teachers conducting professional development drives where practical supports themselves in the form of recognition programs, promotions and career advancement. They can allow teachers to remain enthusiastic about further developing their digital competencies with an eye towards the positive impact that will be made on their students.

2. Methodology

The research method used in this study was quantitative research in order to find out the contribution of Educational Administration Management towards the enhancement of the skills of English teachers in the digital age in Makassar City. Quantitative data were obtained from participants using a survey research design, in which English teachers in various schools in Makassar City participated. This approach was considered for the reason that it made it possible to gather data from a large sample and statistical tools could be used to make generalizations on the large population.

The target population for this study included all the English teachers that teach in the public and private schools in Makassar City. The number of existing English teachers was expected to be around 500 in the total area. Ample of 150 English teachers was selected by simple random sampling technique. This sampling technique was used for every teacher in the population was given a fair chance of being selected to be in the sample hence reducing bias and increasing on the generalizability of the sample.

The main method of data collection was survey, with survey questionnaire developed for this research being also selected as the main tool. The questionnaire consisted of two main sections: personal details and items that targets the variables of interest such as the management practices in educational administration, the level of digital competencies – the extent of backing given by the administrators of school for integrating technology in teaching. The questionnaire employed a 5-point likert scale, and the respondents were able to answer using either 'strongly disagree,' 'disagree,' 'neutral,' 'agree,' or 'strongly agree' so as to give an account of the participants' perception concerning the role of educational administration in the development of their professional practices and the improvement of their digital competencies. The items were adopted from past standardised instruments in other similar studies to enhance reliability and validity.

The data collecting activity was done over a four week period which was between June and July of the year 2024. Following the consent of the school authorities and the approval of the ethics committee, the questionnaires were administered personally and through email in compliance to the teachers' preference. Teachers who got the questionnaire through email were also afforded two weeks to fill and submit the forms. Therefore follow-up reminders were also forwarded to ensure that the response rate maintained a high level. Out of 150 questionnaires administered, 135 were filled and completed, and thus having a response rate of 90%.

The data were analyzed using descriptive as well as inferential statistics. Apart from the descriptive statistics, frequencies, percentages and means and standard deviations were computed in order to describe both demographic data of the respondents and their overall response towards the items of the questionnaire. Therefore, inferential statistical tests including Pearson correlation, multiple regression and ANOVA were conducted in order to determine the relationships between the educational administration management practices and the digital skills of English teachers.

To measure the level of correlation between the kind of support offered by educational administrators and improvement of teachers' digital skills, Pearson correlation co-efficient was used. To determine the accuracy of the dimensions of educational administration management (professional development programs, resource allocation and leadership) in predicting teachers' digital competence multiple regression analysis was conducted. To analyse demographic factors that may explain variations in the level of digital skills among teachers, Analysis of variance (ANOVA) was executed with age, years of teaching experience and type of school (public or private) as the independent variables.

The validity and reliability of the research instruments were as follows; Expert validation was done where the team of professionals in educations administration and digital literacy was used to validate the content of the questionnaires. This feedback was then used to refine the final version of the instrument that was developed and used on the study. In order to test the reliability of the questionnaire a pilot study involving 30 English teachers who would not be used in the actual study was conducted. The internal validity of the members of the questionnaire was ascertained by calculating the Cronbach's alpha coefficient on the different segments of the questionnaire. The Cronbach's alpha values was between 0. 75 to 0. 88 which show the high reliability of the studies.

3. Discussion

This research was conducted with the purpose of assessing how educational administration management aids the English teachers to enhancing of their ability to work in the framework of digital environment in Makassar City. Using the research paradigm, the study aimed at establishing various antecedents that influenced the teachers' achievement and flexibility in responding to the digital teaching environment, including the administrative support, professional development programmes, resource provision, and leadership factors. The analysis of the correlation between those factors and digital skills development, which can be found in the subsequent section of this paper, is based on statistical calculations. Therefore, based on correlational analysis and regression analysis, this study attempts at providing empirical evidence on what factors that may enhance digital competence of English teachers in the digital age.

Table 1. Descriptive Statistics for Educational Administration Support and Digital Skills Development Variables

Variable	Mean	Standard Deviation	Pearson Correlation Coefficient (r)	p-value	Interpretation
Educational Administration Support	4.12	0.68	0.65	0.001	Moderate Positive Correlation
Professional Development Programs	4.20	0.73	0.58	0.002	Moderate Positive Correlation
Resource Allocation	3.95	0.75	0.60	0.001	Moderate Positive Correlation
Leadership Support	4.15	0.69	0.62	0.001	Moderate Positive Correlation
Digital Skills Development	4.05	0.72	N/A	N/A	Dependent Variable

This table presents the descriptive statistics and Pearson correlation coefficients for the main variables examined in the study. The results indicate that educational administration support, professional development programs, resource allocation, and leadership support all show moderate positive correlations with English teachers' digital skills development in Makassar City. The p-values for all correlations are significant at the 0.05 level, indicating that these relationships are statistically significant.

Table 2. Multiple Regression Analysis for Predictors of Digital Skills Development

Predictor Variable	Unstandardized Coefficients (B)	Standard Error (SE)	Standardized Coefficients (Beta)	t-value	p-value	Significance
Educational Administration Support	0.50	0.12	0.48	4.17	0.001	Significant
Professional Development Programs	0.45	0.11	0.42	4.09	0.002	Significant
Resource Allocation	0.38	0.13	0.35	3.85	0.001	Significant
Leadership Support	0.40	0.12	0.37	3.98	0.001	Significant

This table provides the results of the multiple regression analysis conducted to examine the predictors of digital skills development. Educational administration support, professional development programs, resource allocation, and leadership support were all significant predictors of teachers' digital skills. The standardized coefficients indicate the relative importance of each predictor, with educational administration support being the strongest predictor (Beta = 0.48).

Table 3. ANOVA Results for Differences in Digital Skills Based on Teacher Demographics

Demographic Variable	F-value	p-value	Significance
Age Group	3.56	0.024	Significant
Years of Experience	4.12	0.018	Significant
Type of School (Public vs. Private)	2.85	0.045	Significant

This table presents the results of the ANOVA tests used to examine whether there were significant differences in digital skills development based on teachers' demographic characteristics. The results show significant differences based on age group, years of experience, and the type of school (public vs. private). Teachers with more experience and those in private schools generally reported higher digital skills, as reflected in the significant p-values.

Table 4. Reliability Analysis (Cronbach's Alpha Values)

Variable	Number of Items	Cronbach's Alpha	Interpretation
Educational Administration Support	10	0.82	High Reliability
Professional Development Programs	8	0.79	High Reliability
Resource Allocation	7	0.75	Acceptable Reliability
Leadership Support	9	0.88	High Reliability
Digital Skills Development	10	0.85	High Reliability

This table shows the results of the reliability analysis conducted using Cronbach's Alpha. The reliability coefficients for all the variables indicate high internal consistency, with values ranging from 0.75 to 0.88. These results confirm that the questionnaire used in this study was reliable for measuring educational administration support, professional development programs, resource allocation, leadership support, and digital skills development.

This research has led towards the identification s concerning the role of educational administration management in enhancing the use of technology among the English teachers in the digital age especially in the Makassar City. The findings, therefore, bring out the importance of different facets of educational administration to support electronic skills among the English teachers. These findings contribute to the existing literature in several ways in recognising the educational system as an agent of change in supporting teachers to adopt the new innovations.

Another interesting result of this research is a positive correlation between educational administration support and English teachers' digital skills ($r = 0.65$, $p < 0.001$). This is consistent with the earlier studies where it was established that lack of administrative support for teachers kind of hinders their digital competence and their readiness to adopt ICT in their practices [9]. Nevertheless, the study further affirms this finding quantitatively in demonstrating that, indeed, support of educational administration has a direct bearing to the development of digital skills with a standardized beta coefficient of 0.48 in regression analysis P value was computed and the calculated value was less than 0.05.

This finding responds to the existing literature for which the examination of this relationship has been conducted, most of the time, through the use of qualitative methodology or aggregated case evidence [10]. Quantitative approach in this research thus offers proof, which underlines the role of sound administrative support to enable teachers get these skills in the right manner. The research accredits it stating that when educational facilities provide enough guidance, resources, and dedicated strategies for teachers, the migration to adopting technology enhanced pedagogy tools is much easier and efficient is as stated. Another important source noted in the research was the professional development programs that also came out as significant predictors of digital skills acquisition with a correlation coefficient of 0.42. In this regard, this finding supports [11] who suggest that teachers need to involved in structured technological professional development to remain up to date. Compared to several prior research that acknowledge the significance of professional development for overall teaching performance, the present research directly associates professional development programmes to the development of digital competencies, thus effectively addressing a particular niche gap in the research into digital competency. This paper echoes the use of training programs, to train teachers to undertake the change that is required in meeting the needs of digital education. Especially for the case of Makassar City where developing digital infrastructure is relatively recent, offering high-quality professional development programs that target the aspect of digital literacy becomes even more necessary. The enhanced findings are also in line with [12], where the author pointed

out that professional development does not only increase teacher self efficacy in using technology but also overall teaching practice.

The analysis of Variance revealed that there was a positive relationship between the resource allocation and the digital skills development (products moment $r = 0.60$, $p < 0.001$). This finding affirms the assertion that availability of resource is a key facilitator to digital transformation in school as postulated by [13]. The results corroborate the previous studies on how schools with adequate capital including computers, connectivity and appropriate software are better placed to improve their teachers' digital competencies [14]. The present investigation contributes to such body of literature by confirming resource allocation not only affect digital skills but also is a strong predictor variable, had a beta co-efficient of 0.35.

As such, this study points to the importance of addressing resource distribution in learning environments especially in the developmental areas such as Makassar; especially when underlying issues of infrastructural constraints may hamper the advancement of digital learning [15]. Implications of the study indicate that if resources are not properly provided to support DIGTEL training and implementation of more elaborate professional development programs and superior administrative support structures, increased diffusion of digital skills will be difficult to achieve.

The other significant predictor included Leadership support which variables was accorded a correlation coefficient of 0.62, $t = 11.37$. This is in accord with the study done by [16] where they observed that robust leadership is essential for spearheading educational innovativeness. Based on this, the investigations indicate that supposed school leaders provide directions, resources and expectations for appropriate digital usage, teachers are more likely to adopt and expand necessary practices of their digital literacy [17].

It helps to fill the gaps found in the literature by providing real data that can be evidence of leadership contribution toward the development of digital skills among teachers as proposed in [18]. However, in contrast to the previous literature, the present study is precisely drawn by establishing relationship between leadership support and specifically, digital skills development as an unduly researched topic in educational leadership literature.

Besides the investigation of educational administration's importance in this work, ANOVA was applied to identify the variations of the teachers' digital skills fostering in relation to age, experience, and the type of the educational institution they are working at. It was also found that, there were differences in terms of these demographics on the overall digital skills where years of experience and type of school as two demographics that had statistically significant differences ($F = 4.12$, $p < 0.018$; $F = 2.85$, $p < 0.045$).

These findings are relevant to existing gaps in literature related to the ways, in which demographic factors affect the enhancement of digital skills. Inan, in a study done with [19], it was observed that the younger generation of teachers as well as those with the least amount of experience in the kindergartens were the most technologically inclined. This research extends the prior work by highlighting that even if the young generation skilful in technology, the experienced teachers in Makassar and particularly those from the private schools are also equipped the similar digital competency. This is often an indication that expertise and chances to acquire resources in given forms of educational institutions can salve the generation divergence of informatizational disposals [20].

Thus, this research should be considered valuable for the field of educational administration as it shows how diverse aspects of administrative management contribute to English teachers' digital competencies promotion numeratively. This paper has a strength over previous studies that only collected qualitative data, or studies that only focus on one or two aspects of administration and its influence on digital skills acquisition whereby this study has used quantitative and qualitative data to assess the effects of several factors as support, professional development, resources, and leadership on the acquisition of skills in the use of digital devices. From the results of this research, new data on correlation coefficients and prediction values are provided to the educational policymakers and school administrators for developing an optimal framework for enhancing the sense of digital literacy among the teaching fraternity.

Therefore, by filling the gap in the literature on educational administration management on teachers' digital literacy in the developing world, this study brings a larger perspective to what constitutes structures and management for effective implementation of digital technologies in education. In addition, the given study underlines the significance of the programme professionalization, sufficient funding and effective leadership as the key strategies enabling the teacher to manage the challenges inherent in their profession

in the context of the modern digital environment.

4. Conclusions

Accordingly, this research finds out that educational administration management is central in enhancing Makassar City English teachers' digital skills. The studies prove that leadership, resource management and organization, administrative support as well as professional development can effectively strengthen teachers' digital literacy. In doing so, and since the research entails quantitative analysis, it contributes to solving existing gaps following the evaluation and reaffirming the significance of a balanced administrative approach in an integration of digital technologies in education. These considerations speak to the importance of educational leaders providing targeted and professional development support for their staff and ensuring that adequate resources are assigned to the endeavour of preparing teachers for the difficult situated practice of teaching in the context of current digital environments.

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