

RESEARCH ARTICLE



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The role of social media as an electronic communication media in supporting leadership supervision in high schools

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Abstract

Background/Objectives: This study is aimed to build a proposed concept for the application of the integrated leadership model by revealing the possibility of applying the supervised model of school leadership, and the requirements for the application of the integrated supervision model in school leadership, and the obstacles that limit the application, in addition to revealing the significance of statistical differences in the degrees of applicability.

Methods/Statistical analysis: To achieve the objectives of the study, descriptive methodology was used with the study community consisting of all school leaders and supervisors for school leadership in the academic year 1439/1440 AH. The study sample consisted of (75) leaders and supervisors who were randomly selected. The questionnaire consisted of three axes. The third consisted of (12) clauses and the questionnaire was verified and fixed. **Findings:** The results reached the possibility of applying the supervised model of school leadership with a high average value of 3.98. A high score (3.89) is requirement for applying the supervised model of school leadership, with a very high score (4.30) and the constraints that limit the application also high (3.84).

Keywords: Integrated leadership; integrated supervision; school leaders; leadership supervisors

1 Introduction

The supervision of the leadership of school in the various education departments plays a major role in improving school performance. The development of information, communication, and technology has produced supervisory models called electronic supervision, which is also known as integrated supervision⁽¹⁾.

School supervision develops school administration, which addresses the problems faced by schools and helps to improve the educational process. This is achieved by using technology in what is known as integrated leadership, which includes electronic communication between the school leadership supervisor and the school leader via social media such as Facebook, Twitter and WhatsApp.

The effectiveness of school supervision methods on school leadership depends on the communication processes that link the supervisor as a support to the school leader in the field, which indicates⁽²⁾ that: "all individual, collective, scientific and practical supervisory activities that are used to evaluate the content and educational performance, achieve scientific and professional growth, improve education and learning, and achieve the desired goals."

Supervision is associated with technology to overcome the negative aspects of traditional educational supervision methods, the most important of which are related to the difficulties of movement, mobility, the increase in numbers and school leaders, and the difficulty of direct contact with them⁽³⁾.

In the Kingdom of Saudi Arabia, educational supervision has witnessed major development. Several developmental projects have highlighted this, such as the King Abdullah Project for Education Development and the creation of the Electronic Supervision Department by the Ministry of Education, within the general administrative apparatus of educational supervision, and worked on automating education systems and developing e-learning⁽⁴⁾.

Technical progress in the field of education resulted in the so-called electronic supervision model, which also has its pros and cons. It provides the least importance for field visits (face-to-face), because remote communication via electronic networks isolates the school supervisor from the reality of school leadership in the real educational field, which affects the presentation of opinions, their sharing and real-time decision-making⁽⁵⁾.

This study investigated the possibility of applying integrated supervision under the name of integrated leadership, and it was conducted through field visits to the school leadership supervisor via electronic remote communication with school leaders. Based on previous data, this study seeks to develop a proposed vision for the application of the integrated leadership model from school leaders and school leadership supervisors in the Department of Education in Jeddah Governorate.

2 The Study Problem

The school leader is the basis of the school's administrative process and its axis. Their role greatly affects the course of the educational process in schools, in light of the multiplicity of its powers and the expansion of its leadership and social roles. The Kingdom of Saudi Arabia has assigned a coordinator supervisor for each school leader. However, the conditions of many schools do not allow the school leadership supervisor to permanently communicate with the school leader, and only a few visits may occur in the school year, as field visits do not reflect the reality of problems and obstacles that occur in the field. Therefore, the need has emerged to establish a system that ensures direct continuous communication between the school leadership supervisor and school leaders, and this is what the current study seeks by answering the following main question:

What is the scenario for the application of the integrated supervision model of school leadership from the leaders and supervisors of secondary schools in Jeddah?

2.1 Objectives of the study

This study is aimed to construct a proposed concept for applying the integrated supervision model to school leadership, by identifying the possibility of applying the integrated leadership supervision model and revealing the requirements for applying the integrated supervision model to school leadership, and identifying obstacles from the viewpoint of school leaders and school leadership supervisors. The importance of this study is highlighted as follows:

1) This study benefits researchers in administration and modern school leadership, technology, and information technology, and opens the way for them to conduct similar or complementary studies in light of the scarcity of Arab studies in the field of integrated supervision.

2) This study can enrich the Arab Library, representing a new scientific addition that will serve as an important reference for students, researchers and practitioners of the processes of renewed educational supervision.

3 Previous studies and theoretical framework

Despite the novelty of the term, as far as the researcher knows, no study has used the idea of integrated leadership and integrated supervision of school leadership, but there are related studies conducted on electronic supervision of school leaders or practi-

cal education with integrated supervision⁽⁶⁾. This study is aimed at bridging the deficit in supervisors and teachers of special education in rural areas and a project was designed to enhance electronic supervision and integrate computer technology with supervisory training for special education teachers.

The Electronic Enhancement of Supervision Project (EESP) was studied at the University of Southwest India, and educational supervisors followed-up directly cooperating teachers through the four cases of the e-supervision program⁽⁷⁾. The study is aimed at establishing an online learning association to develop supervisory communication between supervisors and teachers and relies on a qualitative, ethical approach based on in-depth interviews and a spatial project, as well as an analysis of the content of e-mails for posts.

In⁽⁸⁾, the research aimed to identify the extent to which educational supervisors use the Internet for supervisory processes in the Al-Baha region. The study revealed that approval of the educational supervisors' practice of using the Internet in supervisory processes in the Al-Baha region was to a medium degree.

In⁽⁹⁾, the study aimed to know the reality and importance of using electronic supervision in facilitating some of the tasks of educational supervisors in kindergarten, and the study sample agreed on the importance of using electronic supervision with a high degree. Farley⁽¹⁰⁾ also conducted a study aimed at identifying the tasks of educational supervision in light of the recent and continuous changes in the knowledge society, most of which are linked to the Internet and different aspects of modern technology.

In⁽¹¹⁾, the importance of electronic educational supervision using e-learning systems was studied to reveal the tasks of educational supervisors from both supervisors and teachers in the Saudi educational system. The results revealed the importance of e-educational supervision using e-learning systems in achieving some supervisory tasks.

In⁽¹²⁾, the study focus was the reality of educational supervisors' use of Internet resources and services in the professional development of teachers in the city of Taif. It was also discovered that there were some obstacles with a medium degree of intensity in the use of educational Internet resources and services in the professional development of teachers in the city.

In⁽¹³⁾ it was found that the tasks of the educational supervisor that can be performed through computer applications, as according to (34) and that all computer applications mentioned in his study were suitable to perform educational supervisors' tasks in a high and medium degree, and the most suitable computer applications for the performance of most tasks are Word, discussion forums, Acrobat, e-book, Publisher, Excel, postal groups, Supervisor program, Paltalk and Messenger.

In⁽¹⁴⁾, it was concluded that computers and the Internet, are important in the field of supervision, especially in the stages of planning, follow-up, preparation, implementation and evaluation, respectively.

In⁽¹⁵⁾, it was found that administrative, technical and human obstacles hindering the implementation of e-supervision, from educational supervisors, are many and that there were differences due to qualification, which favours the most qualified.

In⁽¹⁶⁾, it demonstrates the potential of Saudi schools for technology leadership provided by Learning Resource Centres (LRCs) to enhance the formation of a technology-motivated educational environment. Using the grounded theory methodology and the CBAM stages of concern and levels of use, this study sheds light on Saudi LRCs and their leadership role within the framework of the ongoing ICT-related education reform.

Study by⁽¹⁷⁾ explored the positive and unfavorable impacts of web-based life on understudies' learning conditions. In the present time, the conventional educating 'models' and learning conditions are given extensive analysis as a result of their powerlessness to give understudies room for variety; furthermore, the unfathomable expanding notoriety of Internet-based life has resulted in a need for change to beneficial adaptable models.

Furthermore, investigations⁽¹⁸⁻²⁰⁾ show the effectiveness of educational supervision in improving the performance of language teachers from the teachers' perspectives. In many countries, a lack of skills, training, and resources, for example, time and money, are a common problem for many supervisors and schools. The above investigations discuss the proper solutions.

4 Methodology

The descriptive survey method was used due to its suitability for the purposes and objectives of the study. Assaf⁽²¹⁾ stated that the descriptive approach is based on data collection and extrapolation for interpretation and analysis of educational organisations, to describe a phenomenon and express it quantitatively and qualitatively. It is among the objectives of the current study to build a proposed vision to develop a model of integrated school leadership.

4.1 Study population and sample:

The study population consisted of all high school leaders in education offices in Jeddah with a total number of 198 leaders and supervisors, according to Jeddah education statistics for the academic year 2019/2020. A total of 75 leaders and supervisors of school leadership were chosen in a simple random way, and Table 1 shows repetitions and percentages of the levels of primary

variables.

Table 1. Distribution of study personnel according to the job title, educational qualification and number of years of service.

Variables	Variable level	Number	Percentage (%)
Job title	Supervisor	5	6.7
	School leader	70	93.3
Educational qualification	Bachelor	64	85.3
	Postgraduate	11	14.7
	Less than five years	2	2.65
Number of service years	From five years to less than 10	2	2.65
	From 10 years or more	71	94.7
Total summation		75	100

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127 4.2 Resolution tool

128 Given the nature of the study in terms of its goals, curriculum and society, a questionnaire was built to collect information and
 129 data related to this study by reviewing previous studies related to the axes of the questionnaire whereby the researcher did not
 130 find direct studies to measure integrated leadership, except for general studies that dealt with integrated supervision, such as
 131 Al Qutami's⁽¹⁾. The goal of the questionnaire was determined to build a proposed vision for developing a model for integrated
 132 school leadership, and the areas of measuring the questionnaire were determined by the reality, requirements and constraints of
 133 applying the integrated supervision model from the viewpoint of school leaders and school leadership supervisors. Integrated
 134 supervision is a supervisory model aimed at developing school leaders, improving their performance and enabling them to
 135 solve school problems through an integrated electronic communication process between school leaders and supervisors. This
 136 depends on an effective blend of traditional and modern means of communication, such as the use of social networks between
 137 school leaders and school leadership supervisors. The questionnaire consisted of 45 clauses, which were divided into three axes:

138 **1). The first axis:** Measures the possibility of applying the integrated supervision model to school leadership from the view-
 139 point of leaders and supervisors of secondary schools in Jeddah, it had 17 clauses and consisted of two areas: The first measure
 140 applicability through school administration and leadership processes consisting of 10 clauses, and the applicability of the second
 141 measures through the development of electronic communication and communication processes consisting of seven clauses.

142 **2). The second axis:** Measures the requirements for applying the integrated supervision model for school leadership from
 143 the viewpoint of school leaders and school leadership supervisors, consisting of 16 clauses.

144 **3). The third axis:** Measures "the obstacles that limit the application of the integrated supervision model of school leadership
 145 from the viewpoint of school leaders and school leadership supervisors, consisting of 12 clauses."

146 Responses to the clauses were graded using the five-step scale for the responses of the study sample individuals to the score
 147 clauses (applicability/approval of requirements/availability of constraints) (strongly agree - agree - neutral - do not agree -
 148 strongly disagree), and the instructions of the study tool were formulated. To introduce members of the study sample to the
 149 goal of the study, the questionnaire was finalised and applied to the survey sample. The following criterion was used to judge the
 150 scores (applicability/approval of requirements/availability of constraints), by determining the extent of the scores by calculating
 151 the difference between the highest value (5) and the lowest value (1) and then dividing the result by five levels, so the division
 result was 0.80, which is category length. Accordingly, the results are explained in Table 2.

Table 2. Scoring criteria.

Average computational value	Responses	Degrees (applicability / requirements con- straints)
From 1 to less than 1.80	Strongly disagree	Very low
From 1.80 to less than 2.60	I do not agree	Low
From 2.60 - less than 3.40	Neutral	Medium
From 3.40- to less than 4.20	OK	High
From 4.20 and above	Strongly Agree	Very high

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4.3 Validity and reliability of the study tool:

First: Verify the questionnaire

The questionnaire was presented in its initial form to a committee of five arbitrators from the faculty members of the College of Education at King Khalid University and Umm Al-Qura. This was to ensure the appropriateness of the clauses and to consider the adequacy of the study tool in terms of the number and suitability of the clauses.

It was classified and, therefore, retained, as it received a higher or equal to 80% approval rating from the jury. However, it belonged to the measured field, and the most prominent procedures related to the linguistic formulation of some clauses (three) were deleted to stabilise the number of clauses in the final questionnaire form to 45 clauses. The internal consistency of the questionnaire clauses was confirmed after applying them to a survey sample that included 30 leaders from outside the original sample, and the correlation coefficient was calculated between the estimation of the clause with the total score of the field as shown in Table 3.

Table 3. Pearson correlation coefficients between the vertebra and the overall score for the field.

The possibility of applying the integrated supervision model of school leadership		Requirements for the application of integrated leadership				Constraints that limit Integrated application of leadership			
Management and leadership		Communication and electronic communication							
score	Correlation coefficient	score	Correlation coefficient	score	Correlation coefficient	score	Correlation coefficient	score	Correlation coefficient
1	0.68**	11	0.63**	18	0.59**	26	0.74**	34	0.81**
2	0.74**	12	0.66**	19	0.61**	27	0.63**	35	0.73**
3	0.69**	13	0.62**	20	0.79**	28	0.69**	36	0.88**
4	0.77**	14	0.67**	21	0.63**	29	0.75**	37	0.81**
5	0.68**	15	0.55**	22	0.65**	30	0.64**	38	0.77**
6	0.73**	16	0.61**	23	0.57**	31	0.56**	39	0.78**
7	0.68**	17	0.71**	24	0.65**	32	0.70**	40	0.65**
8	0.74**			25	0.69**	33	0.68**	41	0.62**
9	0.68**							42	0.67**
10	0.73**							43	0.74**
								44	0.73**
								45	0.72**

** D at the significance level 0.01.

Table 3 shows that all clauses are related to areas classified at the 0.01 statistical significance level. The coefficients of correlation between the clauses and the overall degree of the first axis have a range from the application of the integrated supervision model of the school leadership i.e. from 0.55 to 0.77.

The second axis, 'Requirements for applying integrated leadership' ranged from 0.56 to 0.79 and the third axis ranged from the obstacles that limit the application of the integrated leadership from 0.62 to 0.88. This indicates that there is consistency between the responses of the sample to the clauses of the questionnaire fields.

Second: The stability of the questionnaire:

The availability of stability index was confirmed using the method of internal homogeneity by applying the Cronbach's alpha equation, whereby the questionnaire was applied to the exploratory sample.

5 Results and Discussion

Arithmetic means and standard deviations for the fields of the first axis were calculated in the questionnaire. This measures the possibility of applying the integrated supervision model to school leadership, from the viewpoint of leaders and supervisors of secondary schools in Jeddah, and they were arranged in descending order, as shown in Table 4.

Table 4. Arithmetic means and standard deviations for the responses of the study sample in estimating the two fields of applicability of the integrated supervision model of school leadership.

Num-ber	Domains/areas	Rank	Arithmetic mean	Standard deviation	Approval degree/grade
1	School management and leadership processes	1	40.4	0.81	High
2	Develop communication and electronic communication processes	2	3.89	0.89	High
	The possibility of applying the integrated leadership supervision model in school		3.98	0.80	High

Table 4 shows the degree of estimation of the sample members for their approval of the possibility of applying the integrated supervision model to school leadership, with a high degree, with the mean 3.98 and a standard deviation of 0.80, which is a value less than the correct one, which shows the homogeneity of estimates about the mean. This result is due to the existence of a great agreement between school leaders' supervisors and school leaders in terms of the advantages achieved by leadership supervision through its solution to many supervisory problems, whether related to the administrative field or technical supervision of schools in general. The goals that the integrated supervision model seeks to achieve are consistent with the public interest of both school leaders and supervisors, especially given the requirements for implementation. The degree of estimation of the applicability of the integrated supervision model in the field of management and school leadership operations at the first level recorded an arithmetic mean of 4.04 with a 0.81 standard deviation, and then, in the development of communication and electronic communication processes at the second level, a mean of 3.89 with a 0.89 standard deviation and a total applicability score of 3.98 with a standard deviation of 0.80.

The result of the current study implicitly agrees with that of Al-Moabadi's study⁽¹⁴⁾ in which it was shown that school leaders in Mecca knew the concept of electronic supervision, the importance of electronic supervision and the requirements of implementing electronic supervision in supervisory work, and the level of application requirements of electronic supervision in supervisory work was significant.

The results of the current study were implicitly consistent with the results of Simon's⁽²²⁾ study, which concluded the great importance occupied by the Internet among school leaders and supervisors; consequently, the result of the current study implicitly agreed with the results of Al-Balawi and Atoll's study⁽²³⁾. This shows that the degree of knowledge of school leaders' supervisors in the Al-Quwai'ya governorate about the concept of electronic supervision, as a modern model in educational supervision, largely agreed with the result of the Farley study⁽¹⁰⁾. It shows the importance of adopting modern educational supervision standards by electronic schools, to facilitate educational creativity applications and gradually eliminating educational practices related to subjugating knowledge in the traditional educational environment.

The result of this study differed implicitly from the results of Al-Ghamdi⁽⁸⁾ in which it was found that approval of the practice of using the Internet by school leadership supervisors for supervision in the Al-Baha region was somewhat agreed (medium), but there were obstacles in its use in supervisory methods in the Al-Baha region to a medium degree. The following is a presentation of the arithmetic means and standard deviations to estimate the applicability in the fields of the first axis.

Table 5. Arithmetic means and standard deviations for sample responses in estimating the possibility of applying the integrated supervision model in school leadership in the field of school administration and leadership operations.

Degree	Clause	Rank	Arithmetic mean	Standard deviation	Applicability
4	The school leadership supervisor continuously communicates with the school leader at the time of crisis management via a social network.	1	4.30	1.06	Very high
3	The school leadership supervisor employs social networks for the professional development of school leaders.	2	4.25	0.98	Very high
10	Use the web to plan a training course for school leaders.	3	4.22	0.90	Very high

Continued on next page

Table 5 continued

Degree	Clause	Rank	Arithmetic mean	Standard deviation	Applicability
7	Use web applications to activate the school visit.	4	4.14	0.94	High
9	Organising a programme for exchanging school visits in consultation with school leaders to transfer experiences through postal groups using the Internet.	5	4.09	1.04	High
5	Recurrent problems of schools are diagnosed through the electronic supervision form between the school leader and the supervisor.	6	4.04	1.00	High
8	Web applications are used to engage the school leadership supervisor in assessing the needs of school leaders and planning to meet them.	7	4.02	0.98	High
1	The school leader and the school leadership supervisor participate in the school's strategic planning through electronic communication.	8	4.00	1.10	High
6	The remarks of the school leadership supervisor are sent to the leaders after the end of the visit via social networks.	9	3.80	1.24	High
2	School supervisors organise a template for daily schoolwork and send it to school leaders via WhatsApp-ready forms.	10	3.56	1.20	High
	The possibility of applying the integrated supervision model of the school leadership in the field of management and school leadership operations.		4.04	0.81	High

Table 5 shows the degree of appreciation of sample members for agreeing to the applicability of the supervision model. Integrated school leadership in the field of management operations is to a high degree, with a mathematical average (4.04) and a standard deviation (0.81), less than the correct one, which implies that the estimates are homogenous around the average. The researcher attributed this result to the existence of a great agreement between the supervisors of school leaders and the school leaders, in terms of the advantages achieved by the integrated supervision of the school leadership by solving many supervisory problems, whether related to the administrative field or technical supervision schools in general.

5.1 Mechanisms for applying the proposed scenario:

Through the results of the study, procedures and mechanisms can be identified as follows:

- It enables supervisors to send strategic plans forms, proposed activities or administrative solutions electronically to school leaders and follow them with traditional supervision.
- Direct work between the school leader and the supervisor without media through the activation of electronic supervision using social media.
- Blending direct supervision (which is carried out through field meetings), with indirect supervision (which is done through technical networks) and moving from the impromptu supervision of the school leader at a certain time to continuous supervision.
- Continuous training of school leaders on all that is new, without affecting their work in schools and choosing the ideas, models, and supervisory applications of the school leader.
- Self-reflection, for school leaders, to analyse their activities in the light of continuous electronic feeding.
- Analysing school situations through continuous communication (the Internet) to show what the school leader did to get feedback from the supervisor.
- Predicting the difficulties and obstacles that the school leader may or may not face during the performance of his job, especially for the new leader, through direct contact and communication with the school leadership supervisor.
- Defining criteria for the continuous evaluation of the educational process in schools in a participatory manner between the school leader and the school leadership supervisor through continuous communication.
- Producing knowledge of benefit that can be transferred and utilised through the role of the school leadership supervisor as a transfer of knowledge and experience between school leaders, such as transferring the experience and expertise of a distinguished school leader to other leaders via WhatsApp.

- The ability to benefit from the activities of the school leader in the field of communicating through social media to build a distinguished reputation for the school and to announce the school activities to the local community.
- Informing the supervisor and the leader about the school's renewable topics via electronic communication through a participatory process to implement the participatory style of school leadership.
- Motivating supervisors who use the Internet to perform their work for supervisory purposes and setting up dedicated websites via the Internet to activate educational publications in the field of school leadership, training, and professional development on school leadership issues.
- Developing the systems and regulations necessary for the use of the Internet in the supervisory process.
- Investing in the IT infrastructure available in the school.
- Motivating the school leader to participate in administrative work via the Internet and websites, in contact with supervisors and the middle educational administration.
- Holding meetings with the school leader to discuss what was achieved through electronic communication and communication in the school supervision process.
- Providing the school leader with websites that are interested in recommendations of conferences and seminars in the field of school leadership.
- Exchanging opinions, ideas and experiences in the field of school leadership via social networks.
- Using electronic means of communication via the Internet in the field of activating methods of supervising school administration and leadership, and using electronic communication via Twitter or WhatsApp to determine the strengths and weaknesses of the performance of the school leader.

6 Conclusion and Recommendations

In this work, we propose the development of the capacities of supervisors and leaders with training on employing techniques and technical innovations in school supervision. There is an intense need to work on employing social networks to activate the supervisory process of school leadership. It is important to organise the mechanisms of supervision and modern guidance by the integrated supervision system so that the system allows the sending of reports and readings addressed to schools in the field through social networks. As future work, we would like to explore more possibilities of electronic communication media to support leadership.

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