Developing the Professional Performance of Kindergarten Managers in Accordance To Egypt's Vision 2030

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Abstract
The aim of the research is to prepare a training program in the light of Egypt's Vision 2030, and to identify the effectiveness of the program in developing the professional performance of kindergarten managers in the Arab Republic of Egypt by giving kindergarten managers some 0,2 web skills, and the research sample consisted of (30) kindergarten supervisors from the West Tanta educational administration kindergartens, ranging in age from (35-50), and the research was from one experimental group(before / after), the research used the semi-experimental method, and the researcher used the professional performance scale in light of the vision of Egypt 2030 (preparation of the researcher), and a cognitive achievement test for the program units consisting of 50 questions(multiple choice), and the researcher analyzed the data statistically using the package Statistical analysis (SPSS, V28), and the results showed the effectiveness of the program in achieving the goal for which it was created, since it: Practical training on digital leadership is a proposed program to enhance the digital education environment in kindergartens in the Arab Republic of Egypt. We hope to work with governments, educational institutions, teachers and civil society organizations to assess the competencies of digital education, provide training opportunities for managers to help them build digital education skills for Lifelong Learning, and we will work to develop leaders who can effectively use ICT and influence others around them through some applications(Web2. 0), support sustainable development in light of Egypt's Vision 2030, and activate the text of the Egyptian constitution of Article (25), which states that " the state is committed to a comprehensive plan To eliminate spelling and digital illiteracy among citizens of all ages, and is committed to developing mechanisms for its implementation with the participation of civil society institutions according to a specific time plan.

Keywords: Digital Leadership, Professional Performance Development, kindergarten Managers, Egypt Vision 2030, Web Skills 0,2.
Introduction

The digital leader must understand the basics of digital leadership, and understand that digital transformation is not about technology, but about the competencies that the leader possesses strategy, culture, capabilities, and understanding the needs of individuals.

Technology-based education and training represents one of the successful processes that contribute to integrating technology into the educational environment and achieving a knowledge society, through the use of advanced technologies from the fourth generation technology, such as computer programs, the internet and social networks, in the teaching and learning process, and the importance of using technology is increasing, as the new generations are characterized by superior ability and speed in using technology and its various means.

Increased expenditure on technology resources and increased access to computing devices indicate the need for further research on the leadership implications of PSEL in order to "promote the effective use of technology in the service of teaching and learning" (Reston, 2015, 12).

Educational leaders are involved in supporting faculty members by setting clear educational expectations, protecting educational time, monitoring children's progress, and promoting professional learning (Matthews, 2010), and as such the role of the leader as a digital leader has become an important area of research based on previous research of technology-savvy supervisors such as: (Richardson, 2018), (Sterrett, 2019).

Sheninger (2014) calls on leaders to break through the inevitable isolation of leadership through the development of professional learning networks within their organizations, and in light of COVID-19 and its repercussions it has become clear that technology plays a key role in learning networks (Baglama, 2022).

It should be emphasized that the digital leader needs to understand not only the way technology works, but also how to use it to create a competitive advantage, by understanding the behavioral and social transformations created by new technology engines: such as mobile phone, social networks, electronic clouds, and using these major transformations to raise the level of individual and institutional performance.

Therefore, it was necessary to pay attention to the work of a program for kindergarten managers to have skills that correspond to the children of the fourth generation.

Study Problem:
The sense of the problem stems from the following:

1. The Egyptian state has sought to achieve Vision 2030 at all levels.
2. Under pandemic conditions such as the emerging coronavirus, digital education has become the most important educational tool.
3. The field observations that the researcher monitored during her work in kindergartens as a teacher and then directed are that: most kindergarten managers are not familiar with the skill of using technological means.
4. Pointed out by Xiaoyu Yang, 2011, p.169) that educational leaders need greater knowledge about optimally combining leadership and digital resources to support teaching and learning objectives”.
5. There is little research on how to design professional performance development to support sustainable learning for kindergarten managers – within the limits of the researcher's knowledge such as the study of both: (Saraih, Emelia, 2022 / Li, Liang, 2022 / Yodogawa, Yumi, 2022).

The Study problem can be limited to the following questions:

1. What is the impact of a digital leadership program to develop the professional performance of kindergarten managers in the light of Egypt's Vision 2030
2. What is the content of the Digital Leadership Program in professional performance development for kindergarten managers?

Assignments
1. There are no significant differences between the average scores of the experimental group before and after applying the program on the professional performance development scale.
2. There is no statistically significant difference at the level of \((\alpha \leq 0.05)\) between the average scores of the experimental group in the pre- and post-application on the achievement test associated with the Digital Leadership Program* to develop the professional performance of kindergarten managers.

Objectives
1. Designing a program in digital leadership to develop the professional performance of kindergarten managers.
2. Involve digital leaders in digital professional learning networks.
3. To help achieve Egypt's Vision 2030 in education and training.

Importance of Study
1. It is hoped that the results of this study will benefit the leaders in the Ministry of education by recognizing the importance of the role of digital leadership in the technological era.
2. Help managers in completing their work and accept the difficulties of work pressures and good management.
3. Helping teachers and managers to become successful digital leaders in the future.
4. This study can be a criterion for the selection and training of kindergarten leaders in the ministry, and focus the attention of officials more on providing support at all administrative and leadership levels.
5. Enable kindergarten leaders to produce content on the internet and allow business partners to modify it in favor of the educational process.

Limitation:
the search boundaries were divided into:

A. Spatial boundaries:
The sample was selected from the kindergarten stage managers at the Egyptian Ministry of Education (West Tanta educational department).

P. Time limits:
The program was implemented, data was collected and analyzed quantitatively for 6 weeks, two days a week.

C. Human limits and research sample:
The research sample consisted of (30) educational leaders at the kindergarten stage, the research community consisted of mentors and supervisors (first teacher, first teacher a, expert teacher, senior teacher).

Terminology
Digital Leadership:
“Bonfou” defines digital leadership as "mobilizing leadership resources and structural leadership, to convince the personnel of the enterprise in order to gain access to new information and communication technologies and resources that can help achieve the goals of Education". (Bounfour, 2016, 134).

"Franco" defines it as "the ability of leaders to create a clear and meaningful vision of the digitization process and the ability to implement strategies to achieve it" Mario Franco, 2020, 4).

The researcher defines digital leadership procedurally in this research as "the degree that the kindergarten director receives on the digital skills observation card of the Digital Leadership Program ".

The researcher defines it terminologically as "the process of mutual influence on others( between the leader and the members of the institution) - that is, there is no one leader who has knowledge-and control of knowledge through the use of digital technology in order to create a clear vision of the institution and make quick and consistent decisions of what is required to achieve strategic success of the digitization of the educational institution".
Professional Development:

Professional development is defined as "helping the institution to perform its task efficiently by encouraging and developing human resources" (Mohammed Abdulwahab, 2003, 121).

"Professional development is defined as activities that develop an individual's skills, knowledge, experience and other characteristics as a teacher" OECD, 2009, 49). (Walaa Salah al-suwaifi, 2022, 7) defines it as "an organized, individual-centered process that aims to bring about specific behavioral and mental changes to meet urgent current and future needs, required by the individual, the work he performs and society as a whole". The researcher defines it procedurally as "the degree obtained by the kindergarten director on the scale of professional development".

Kindergarten managers:

(Isa Ali, 2009, 168) defines kindergarten managers as leaders, planners, organizers and supervisors of the management of daily kindergarten activities, including organizing interactive children's activities with teachers, organizing social and entertainment programs, and developing interaction with the local community.

The researcher procedurally defines the kindergarten manager as: the person who takes over the actual management of any kindergarten institution in the city of Tanta.

Experimental and design methodology:

The quasi-experimental method (Quasi-Experimental Research) was used, which is based on the scientific method based on careful observation in the study of events and problems, imposing hypotheses, and controlling the adjustment of various variables intentionally, and the experimental design of current research is based on (experimental design with one experimental group – before - after).

(1) OECD: Organization for Economic Cooperation and development

Theoretical framework of the study:

Elements of Digital Leadership:

Digital leadership consists of four components:

A. Computer: its function is to receive and store data to reach the desired results.

B. Computer programs: this is the set of programs that are used to run a computer device.

C. Communication networks: which are used by more than one beneficiary at the same time (communication via networks).

D. The human element: they are experts and workers in the field of knowledge and represent digital leaders and analysts of digital resources (Priyanthi, 2020, 64).

The following sample explains the digital leadership tools from the point of view of "Petri":

![Figure 1](Petry Digital Driving Tools (2014,2018))

Stages of Digital Leadership Application:

In order to implement digital leadership, it must go through two stages:

The first stage: the administrative documentation stage: It includes documenting the organizational structure of the institution, functional tasks and services provided by the organization, and this is to benefit from it in the upcoming developments.

The second stage: the stage of administrative development: It is the development with a technical perspective, and new concepts can be added such as: knowledge management; to be developed according to the best modern leadership concepts. (Laila Aboulela, 2013, 178).
Tips for Digital Leader Success:

Enterprise-wide:

1. Recognize that the digital number is not always about the size of glamorous projects, but about changing people and ways of working.
2. Develop digital skills across the organization, not just within a separate department.
4. Provide leaders with a mandate and budget to test and integrate digital technology as well as flexible ways of working.
5. Start all programs and projects using research and user needs, repeating what you do and how to do it.
6. Inspire the difference about the benefits of digital transformation with concrete proof of concept, even if successful experiences are small-scaled.

On a personal level

1. Craft a strong leadership narrative that courageously outlines what you think is important to leadership in digital transformation.
2. Don't use words alone, be a real role model for the new leadership.
3. Strong and clear leadership will send the message that it is time to make a difference.
4. Foster a culture that identifies future leaders early in their careers.
5. Building communities of leaders by recruiting employees at all levels.
6. Make transparency and trust the cornerstones of your culture to unleash the energy that exists at every level and in every corner of your organization.
7. Promote people who adopt the skills and mindsets you value most
8. Stay away from those who do not adopt good mindsets and skills as leaders.
9. Talk a little and do a lot.

Principles of supporting professional development:

Supporting the professional development of kindergarten managers is based on several principles that lead to the success of the professional development process, as follows:

1. Intentional process: Supporting professional development is a well-thought-out and organized process based on a clear vision of the desired goals, and is carried out through:
   a) Clearly define goals.
   b) Development should be of value to principals and teachers.
   c) Determine the ways to achieve the set goals, taking into account the expected changes.
2. Systematic process: The term process refers to continuity, and it is carried out through organized processes that take all levels of professional development, in order to achieve continuous improvement in the competencies and attitudes of the educational leader.
3. Continuous process: Professional development is a lifelong process.
4. A process that focuses on individual and organizational change: Professional development involves changes in all employees and at all organizational levels of the organization.
5. Participatory collaborative process: where the process of professional development between educational leaders and teachers is involved in planning and implementation, each according to his duties and responsibilities towards the implementation and evaluation of the professional development plan (Rateb Salama, Ibrahim Ali, 2016, 181-182).

The role of the director and Guide in supporting the strategic plan for education in the kindergarten stage 2030.

The main goal of the strategic plan in the kindergarten stage in Egypt's Vision 2030 is to expand the number of those admitted to kindergartens so that the percentage reaches 80% of Egypt's children, improve the quality
of education in the age group of 4-6 years, and submit proposals to fill the deficit and exploit all spaces to turn them into kindergarten halls, and the role of the director and mentor is as follows:
- Supporting the objectives of the Strategic Plan 2030.
- Assisting teachers in providing high quality education.
- Providing resources and supporting creative ideas.
- Using modern strategies as stated in the parameter guide accompanying the 2.0 curriculum.
- Organizing workshops and courses for teachers on an ongoing basis.
- Organizing programs and meetings for civil society and teachers on the importance of integrating people with mild disabilities in kindergartens (General Administration of Kindergartens, 2020, 8).

The study of Lin Zhong (2017) to explore digital leadership indicators in the context of education from kindergarten to the end of secondary education based on ISTE-A standards, and the sample consisted of female principals of all schools and did not include male principals, and the results showed that digital leadership is referred to as an integrated technical vision and support for the technology plan by all stakeholders, and indicators of learning culture in the digital age include adequate hardware, technology modeling, and effective use of technology.

A study (Haya Ibrahim Abdulrahman, 2019) looked at identifying the degree of application of digital leadership in the Ministry of Education in the Kingdom of Saudi Arabia from the point of view of educational leaders, the study population consisted of all educational leaders in the Ministry of Education from directors in the general administration in the ministry and directors of departments and heads of departments in the Ministry of Education, which has a number of leaders (102) based on the organizational structure of the Ministry of Education, and a comprehensive inventory of community members was made and questionnaires were distributed to all members of the study community and individuals. The study consisted of (96) educational leaders, representing (94.1%) of the study population. The results showed that the study members of the educational leaders believe that digital leadership in the Ministry of Education is applied to an (average) degree. 3. There is a convergence in the approval of the study members on the phrases of the axis "the level of development of administrative work in the Ministry of Education from the point of view of educational leaders" where the axis includes (11) paragraphs, the responses of the study members came on (10) paragraphs of the axis at a (high) level.

Nouwar Alhamad, 2020, assessed the training needs of kindergarten principals in light of the requirements of the digital age from their own perspective, the study sample consisted of (90) kindergarten principals in the Jordanian Jerash region. A questionnaire was used to collect data that addressed needs in three areas related to the use of technology. Statistical analysis showed that school principals' estimates of their training needs were generally moderate, with slightly higher needs related to ICT recruitment in kindergartens and the management of the educational process. The results also showed that there were no statistically significant differences between respondents' estimates regarding academic qualifications, years of experience or kindergarten ownership.

The study (Luecha, 2022) aimed to: 1) study the components and indicators of digital leadership for kindergarten officials 2) study the current conditions and desirable necessities of digital leadership for kindergarten officials 3) develop a digital leadership development program for kindergarten principals 4) study the impact of using the digital leadership development program for kindergarten principals, and the sample reached 30 people, and the results of
the research were as follows: 1) Digital leadership for kindergarten officials consists of 7 components, 22 indicators, 2) The desired conditions for digital leadership for kindergarten officials. The overall average was at a low level, 3) the need to develop digital leadership among kindergarten principals, and the highest value was digital vision leadership 4) the development of a digital leadership program for kindergarten principals is generally appropriate and beneficial.

**Tools:**
1. Preliminary data form (prepared by the researcher).
2. Scale of professional development in the light of digital leadership (prepared by the researcher).
3. Digital skills observation card (prepared by the researcher).
4. Digital Leadership Program (prepared by the researcher).

**Procedures:**
1. Reviewing the literature of educational research related to the subject of research, and benefiting from it in preparing the theoretical framework of the research, research tools, as well as linking the results of the current research with the results of previous studies.
2. Access to international professional standards for educational leaders.
3. Preparing a digital leadership program to support the professional development of kindergarten principals and presenting it to the arbitrators to express their opinion and amend it according to their opinions.

**Content of the proposed program:**
The program contains four axes:
1. To be digital (Egypt Vision 2030 and digital leadership, to be digital, PowerPoint program)
2. Digital identity (creating and sharing digital resources, bloggers).

4. Capacity Development and Innovation Cultivation (Online Content Creation, Wiki).

*Description of the activities used:
1. Knowledge activities including: (Egypt Vision 2030, digital leadership, network selection, copyright).
2. Group activities including: (creating and sharing digital resources, networks, creating online content)
3. Skill digital activities, including: (presentation program, blogs, Thames, wiki).

**Pre-application of tools:**
The researcher applied the research tools before with the experimental group from (11/8/2022) to (18/8/2022).

**Implementation of the proposed programme:**
The researcher applied the content of the program with the experimental group from (20/8/2022) to (17/9/2022).

**Dimensional application of research tools:**
The researcher applied the content of the program with the experimental group in the period from (17/9/2022) to (21/9/2022).

**Results**

**First:** Presenting the results of the performance of the experimental group on the scale of supporting professional development:

The results were analyzed to answer the following question: What is the effectiveness of the digital leadership program on supporting kindergarten principals? Where the researcher analyzed and compared the results of the experimental group on the scale of professional development before and after the application of the program, and the averages and standard deviations were calculated in the application of the before and after the experimental group, in order to test the validity of the research hypothesis, which states: There are no statistically significant differences between the average ranks of the experimental group’s scores before and after the application of the program on the professional development scale, the researcher used the SPSS statistical package.
program. V.28" as shown in the following table:

Table (1) The value of "T" and its statistical significance for the difference between the average scores of the experimental group in the pre- and post-measurement on the scale of professional development:

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Degree of Freedom</th>
<th>Value T</th>
<th>Significance Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Scale Pre</td>
<td>30</td>
<td>183.08</td>
<td>8.52</td>
<td>29</td>
<td>100.46</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>After me</td>
<td>30</td>
<td>289.87</td>
<td>8.76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is clear from the previous table that the average scores of the experimental group in the pre- and post-measurement in the total scale of professional development is 183.80, 289.87 respectively, with a standard deviation of 8.52, 8.76 respectively, and that the value of "T" is 100.46 function at the degree of freedom 29 where (t,100,46) = 29,P<0.01), which indicates that there are statistically significant differences between the average scores of kindergarten principals (experimental group) in the pre- and post-measurements in the scale of professional development in favor of the post-measurement. Thus, the zero hypothesis is rejected and the alternative hypothesis is accepted, meaning that the experimental group showed a significant development in the acquisition of digital leadership skills in telemetry, and this result is consistent with the results of previous studies on the existence of a positive impact of using a training program in supporting professional development in the light of digital leadership, such as: (Richard, 2004), and) Manuel E., Sterrett, 2020).

The following figure shows the average scores of the experimental group in the pre- and post-measurement on the scale of professional development.

Figure (2) Average scores of kindergarten principals for the experimental group on the pre- and post-measurement in the scale of professional development.

Second:

Presenting the results of the performance of the experimental group in the digital skills observation card included in the proposed program.

Where the researcher analyzed and compared the results of the experimental group on the digital skills observation card before and after the application of the program, and the averages and standard deviations were calculated in the pre- and post-application of the experimental group, in order to test the validity of the research hypothesis, which states: "There is no statistically significant difference at the level of (α ≤0.05 between the average scores of the experimental group in the pre- and post-application of the total scores of the skill scorecard associated with the digital leadership program", the researcher used the SPSS statistical package program. V.28" as shown in the following table:

Table (2) The value of "T" and its statistical significance for the difference between the average scores of kindergarten principals - the experimental group in the pre- and post-application of the total scores of the skill scorecard associated with the digital
leadership program to support professional development

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Degree Freedom</th>
<th>Value</th>
<th>T Significance Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Scale Pre</td>
<td>30</td>
<td>21.56</td>
<td>2.43</td>
<td></td>
<td>29</td>
<td>32.57 &lt; 0.01</td>
</tr>
<tr>
<td>After me</td>
<td>30</td>
<td>47.10</td>
<td>2.41</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It appears from the results summarized by the previous controversy that the value of "T" is a function at the level of < 0.01 where (t32.57) = 29.P<0.05), which indicates a statistically significant difference between the average scores of the experimental group managers in the pre- and post-measurement of the cognitive achievement test for the digital leadership program for the professional development of kindergarten principals in favor of the post-measurement.

Figure (3) Average scores of kindergarten principals for the experimental group on the pre- and post-measurement in the digital skills observation card.

These results are consistent with the study of LinZhong (2017), Haya Ibrahim Abdulrahman (2019), and Styliani, 2021.

Recommendations:
1. The need for the Ministry to seek to establish websites to exchange experiences with external institutions.
2. The Egyptian Ministry of Education should include the digital leadership program as one of the main pillars in school leadership and management programs.
3. The need to provide an incentive for the employees of the Ministry of Education to shift towards digital leadership.
4. The need for the independence of the kindergarten stage and to be a stage that is not attached to primary education so that the kindergarten teacher can rise within the stage from teachers, then an agent for the kindergarten and then a director of the kindergarten, i.e.: the application of a career ladder for promotion within the kindergarten stage.
5. The need to adopt standards for professional development by policy makers to guide the design, evaluation and financing of digital learning provided to teachers.
6. Principals should not ignore the integration of technology in teaching and learning from kindergarten to secondary education.
7. The need for continuous monitoring and evaluation of training programs and workshops conducted because they are considered a key factor in the effective review and modification of these programs.
8. Encourage continuous competition between kindergartens through digital technologies.

Proposals:
1. A quantitative study to examine digital driving indicators in kindergarten.
2. A study to answer the following question: Is digital leadership affected by gender and age?
3. Design a program to develop kindergarten teachers' awareness of digital resources and control them.
4. Designing a proposed program to develop the skill of preparing and implementing innovative activities for the kindergarten teacher through digital resources.
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