

Proposed Framework for Talent Management in Egyptian Schools in Light of the Digital Age Requirements

Akram Ibrahim Kahouf¹

Dalal Fathy Eid²

Abstract

This research aims to provide a proposed framework for talent management in the Egyptian schools in light of the digital age requirements. It utilizes the descriptive methodology for its convenience. A questionnaire was conducted to identify the digital practices of talent management professionals in the Egyptian schools. The questionnaire included domains of planning, talent retention and attraction, training and development, and evaluation. The research tool was applied to a sample of 190 talent management professionals in the educational directorates, administrations, and affiliated schools in nine Egyptian governorates. Based on the feedback from talent management professionals, a proposed framework for developing talent management in the Egyptian schools was provided in line with the digital age requirements. The proposed framework includes its philosophy, objectives, premises, content, and implementation requirements.

Keywords: Talent management, Egyptian school, digital age.

¹ Research Professor and Head of the Educational Activities and Talent Nurture Research Division at the National Center for Educational Research and Development, Cairo. E-mail: akramkah@yahoo.com

² Research Assistant Professor in the Educational Activities and Talent Nurture Research Division at the National Center for Educational Research and Development, Cairo.

Introduction

The digital transformation of human resources involves altering operational processes and functions to integrate technology-driven mechanisms and data management. This transformation encompasses changes in the human resources processes as well as shifts in teamwork and work methodologies.

The Egyptian schools are encouraged to adapt by leveraging data to inform talent management operations and strategies, which are crucial for maintaining competitiveness. Organizations prioritize efforts to attract, employ, develop, and retain talent, recognizing individuals as unique assets within an innovative environment that fosters innovation and provides organizational advantages. In the current era of digitization, the effective use of digital technology is essential for managing diverse talents and implementing strategies aimed at achieving optimal outcomes in educational talent management (Baqtayan, 2014).

Digitizing talent management within the educational process presents challenges that necessitate unconventional approaches to align with global changes. Achieving these aspirations requires the adoption of programs and strategies that support countries in realizing their future visions. Modern digital talent management and the utilization of technology are strategic objectives aimed at establishing competitive advantages within the educational institutions (Tatoglu, Glaister, & Demirbag, 2016).

Consequently, the ongoing digital transformation influences talent management operations and strategies in the Egyptian schools, necessitating the implementation of mechanisms for identifying and retaining talents. These efforts contribute to the achievement of sustainable development goals, particularly by investing in human resources over the long term.

Research Problem and Questions

Talent management strategies are prioritized for enhancing performance in educational institutions due to the continuous changes in the educational field that necessitate investment in human capital. The Egyptian school system faces current and future challenges that require unconventional methods and mechanisms to keep pace with rapid changes and digital transformation. Achieving the aspirations of Egypt's strategic sustainable development plan (Vision 2030) and its associated programs and strategies necessitates approaches and mechanisms that align with these aspirations. Additionally, the current state of talent management in the Egyptian schools reveals several deficiencies, including weak utilization of digital practices related to talent management, whether in planning for talent identification, attracting talent, or retaining, training, and evaluating talent.

In light of these issues, there is a pressing need to develop a framework for talent management in the Egyptian schools that aligns with the demands of the digital age. This would address the weaknesses and deficiencies in the talent management practices within schools, thereby helping achieve their objectives and improving their performance in talent management, including planning for talent identification, attracting talent, retaining, training, and evaluating talent.

To address this problem, the current research seeks to answer the following questions:

1. What are the requirements of the digital age?
2. What are the talent management practices in the Egyptian schools in light of the digital age requirements from the talent specialists' perspective?
3. What is the proposed framework for talent management in the Egyptian schools in light of the digital age requirements?

Review of Literature

Section One: Talent Management

Concept of Talent Management

Anupam and Upasna (2012) define talent management as "the process of attracting highly skilled individuals, engaging them, developing them, retaining them, and developing those who are currently in high positions" (p. 22). Moreover, Jain (2012) describes it as "the process of nurturing, developing, and engaging existing and new employees, maintaining them, and attracting highly skilled individuals to work for the organization" (p. 497).

Talent management is also defined as "integrated strategies based on activating processes of searching, attracting, selecting, and developing employees who possess unique and exceptional capabilities that meet the current and future needs of the organization to achieve the best outcomes" (Mannaa, 2017, p. 295).

In the context of the current research, talent management in the Egyptian schools is defined as a set of practices, processes, and strategies implemented by talent specialists to improve planning processes for identifying and nurturing gifted students, attracting and retaining them, training them, developing their talents, and evaluating their performance in light of the requirements of the digital age to achieve the desired objectives.

Importance of Talent Management:

The significance of talent management is underscored by Al-Harithi et al. (2015) through several key points:

- It facilitates the achievement of the institutional goals and enhances performance.
- It fosters a culture of self-regulation.
- It aids in identifying the strengths and the competencies required to meet the organizational expectations.
- It identifies objectives to bridge the gaps in current specializations.
- It helps set specific goals based on the existing competencies.
- It provides proposals for action plans, evaluates human resources, and clarifies how to reorganize them.

Dimensions of Talent Management:

Idris and Abu Jumaa (2019) outline several strategies that talent management adopts to achieve its objectives, deriving twelve strategies from renowned global models. Five primary strategies are emphasized:

- 1. Talent Management Planning:** This strategy involves determining the institution's needs for talented employees and providing a comprehensive and accurate database on the numbers and locations of current and future leadership required from talented individuals. It includes preparing a talent management plan that integrates with the organization's strategic plans.
- 2. Talent Attraction:** The success of talent attraction depends on effective talent planning, illustrating the sequential and interdependent nature of these strategies. Talent is attracted through searching, studying, and investigating competent and qualified human resources to fill vacant positions at various organizational levels. This can be done through media advertisements, collaboration with government and private employment agencies, engagement with universities and higher education institutes, and leveraging employee recommendations to identify suitable candidates. Additionally, electronic recruitment can be employed to reduce time, effort, and costs (Al-Hoshan, 2017).
- 3. Talent Retention:** Global models concur that talent retention is the most critical strategy in talent management. It encompasses all factors contributing to retaining talent, such as direct and indirect benefits and compensations, scholarships, training for leadership talents, outstanding offers for higher-level positions, and providing both financial and moral incentives. Creating an attractive environment, enabling talents to choose projects, topics, and teams they wish to work with, and adopting their creative ideas and supporting their implementation are crucial elements for retaining talent within the organization.
- 4. Talent Training and Development:** This strategy focuses on the developmental functionality to embed the organization's vision, values, and goals in the consciousness of new and existing employees and optimally enhance their productivity. It involves identifying their training needs, engaging them in the process, creating a supportive learning environment, and ensuring the transfer of training impact to the field.
- 5. Talent Performance Evaluation:** This strategy involves analyzing the performance of talents in all assigned tasks and measuring their competencies and achievements. It aims to identify gaps in individual and group performance. The results of this evaluation are used to formulate future talent management plans across various strategies. One indicator of top leadership's commitment to talent management is the time spent addressing issues related to talent performance analysis, evaluation, talent review sessions, and providing services to the (Al-Zubaidi & Abbas, 2015).

Given the role of talent management in achieving exceptional performance and enhancing the educational process, numerous studies have explored its activation in the education sector. Al-Khunifer (2018) aimed to present and analyze prominent global models in talent management and examine the status quo of talent management in the Saudi Ministry of Education. Al-Saeedi (2017) focused on assessing the state of talent management in the public schools in Kuwait and providing proposed mechanisms for its implementation. The results indicated that the implementation of talent management in Kuwaiti public schools was at a moderate level, with dimensions ranked in descending order: recruitment management, talent development management, and performance and motivation management.

Al-Hoshan (2017) aimed to identify the implementation status of talent management strategies in the performance of school leadership within the Saudi Ministry of Education, determine the requirements for their development, and review global models in talent management. The study found

out that the implementation of talent management in school leadership was at a moderate level, with dimensions ranked in descending order: performance evaluation, planning, training, and retention. All dimensions were also rated as moderate in terms of requirements.

Al-Ghamdi (2016) conducted a study to determine the practice of talent management strategies in girls' education offices in Riyadh. The study aimed to assess the degree of practice of talent management strategies and provide proposals to enhance talent management in education offices. The findings indicated that the practice of talent management in Riyadh education offices was moderate, with dimensions ranked in descending order: talent planning strategy, talent training and development strategy, talent attraction strategy, talent performance evaluation strategy, and talent retention strategy. The study also identified significant obstacles and proposed solutions.

The review of these studies reveals a contemporary and growing interest in the concept of talent management. These studies covered various aspects of this concept, with most employing survey methods and questionnaires to examine the state of talent management, as seen in the works of Bahari (2017), Al-Hoshan (2017), Al-Khunifer (2018), Al-Saeedi (2017), Mahmoud and Awadallah (2013), and Aytac (2015). These studies sampled different categories of educational and administrative leaders within the Ministry of Education, including education office directors, unit heads, and teachers. Collectively, the studies explored the dimensions of talent management from global models, adapting them to educational field applications, with varying rankings across studies: planning, training, retention, performance evaluation, and motivation.

The current research benefits from previous studies by incorporating institutional talent management dimensions and strategies to adopt these strategies in managing talent within the Egyptian schools by talent specialists. The research focuses on five strategies: planning, attraction, retention, training and development, and evaluation and follow-up. It also considers the potential for implementing these strategies digitally, consistent with contemporary advancements.

Discussing the essential traits and responsibilities of the manager or leader of talented students, whether they are teachers or talent specialists, is crucial for effective talent management. According to Al-Hasi (2021), the primary responsibilities and roles of a talent manager include:

- Preparing and organizing enrichment activities for talented students.
- Integrating educational experiences and thinking skills into the regular curriculum.
- Encouraging creative and leadership attitudes and fostering creative production among talented students.
- Collecting educational experiences related to practices directed toward talented students.
- Encouraging students to work at their own pace and ability level.
- Providing guidance and counseling in academic, emotional, social, and career domains.
- Challenging students' abilities.
- Planning lessons and developing innovative methods for teaching talented students.
- Incorporating thinking and creativity skills.
- Encouraging students to develop discipline and creative productivity.
- Gathering materials and resources and inviting experts in areas of interest.
- Raising awareness among students and parents about the opportunities and challenges associated with giftedness.

Section Two: The Digital Age

Concept of the Digital Age

The digital age is defined as "an era primarily based on the dissemination, production, and utilization of knowledge through the ability to convert all forms of information, graphics, text, images, and sound into digital form. This information is transferred among individuals in society through the internet and various electronic devices. This transformation has shifted the interactive communication environment among individuals and communities to a virtual environment that differs entirely from the traditional environment" (Badawi & El-Sayed, 2020).

Characteristics of the Digital Age

The digital age is marked by a decrease in the reliance on paper for transactions and interactions, with electronic money, digital newspapers, and e-books becoming prevalent. Additionally, virtual communities have emerged, gathering geographically dispersed individuals (Mahmoud et al., 2020; El-Sayed, 2017).

Key attributes of the digital age, highlighted by Mahmoud et al. (2020) and El-Sayed (2017), include:

- Rapid expansion in knowledge and technology, accompanied by extensive use of communication systems and the Internet.
- Establishment of the information sector as a critical component of the economy.
- Growing utilization of information as an economic asset.
- Surge in electronic publishing driven by information creation, transmission, and computer technology.
- Proliferation of information networks utilized by individuals, organizations, and governments.
- Development of information-centric communities and organizations focused on effective management and accelerated achievement.

Abdullah (2018) underscores that in education, the digital age:

- Facilitates the advancement of electronic publishing capabilities.
- Cultivates networks within the information community that share common scientific interests.
- Supports learning processes through the exchange and dissemination of information, thereby enhancing communication among educational communities.

However, the significant advancements in educational technology and communication technology present notable challenges to both local and international educational systems, necessitating substantial changes at the broader educational system level and specifically within educational institutions (Markoon & Maloshi, 2019).

From this perspective, it becomes crucial to identify aspects of the educational system that require attention to effectively adapt to the demands of the digital age. These aspects profoundly influence talent management and the development of the gifted individuals, as outlined below:

Aspects of the Educational System in the Digital Age

Teacher Perspective: Continuous professional development is crucial for educators to acquire and continually update their skills in digital technology utilization. This adaptation is essential for addressing the diverse learning needs of students, necessitating educators to innovate their pedagogical practices and adopt contemporary methodologies that align with these requirements.

Learner Perspective: In the digital era, learners are commonly termed Digital Natives, having grown up in an age where technology is intrinsic and indispensable. They demonstrate adeptness with digital tools from an early age and are encouraged not only to consume information but also to actively generate knowledge, applying it meaningfully in real-world contexts. It is imperative for learners to possess awareness of and familiarity with digital culture, engage positively with digital devices and social media, and actively participate in digital innovation, contributing constructively to digital environments.

School Environment: Ensuring access to technological devices, tools, and resources within educational settings is fundamental for aligning with the digital evolution in education. The process of digital transformation relies heavily on the availability of computers, software applications, and diverse modern technologies such as interactive videos, augmented reality, and virtual reality. Additionally, electronic curricula designed by educators, incorporating digital content, interactive learning activities, and electronic assessments, play a pivotal role in transitioning from traditional to digital learning environments. Furthermore, online education facilitates the integration of educational practices with cutting-edge technologies, promoting flexible learning opportunities and nurturing advanced cognitive skills among students.

Digital Learning as an Outcome of the Digital Age

Digital learning has emerged as a viable solution to enhance educational practices amidst the pervasive integration of digital technologies across various facets of life. Technological advancements have significantly impacted education through digital learning methodologies, expediting the renewal of knowledge and offering alternatives during crises and pandemics that constrain conventional educational approaches.

Concept of Digital Learning

Markoon and Maloshi (2019) define digital learning as “the use of technology in helping students to learn whether technologies used inside the conventional classroom like media and electronic devices or through virtual classes where students learn interactively via the internet.

Advantages of Digital Learning

According to Al-Sayeh and Al-Hajj (2021), benefits of digital learning include:

- Facilitating communication among students, and between students and their schools, motivating students to participate and interact in the academic topics presented.
- Providing opportunities of equality and justice. All students have the opportunity to share their opinions through the accessible communication tools.
- Facilitating communication among teachers even outside the school hours through direct and visual electronic communication or through indirect written electronic communication.
- Diversifying teaching methods commensurate with students' capabilities. There are visual, audio and written methods provided by digital learning. It also enables switching from one method to another according to students' capabilities.
- Releasing learners from time and place constraints. It enables learners to receive knowledge whenever and wherever they are.
- Accessibility of large numbers of students to learn without being restricted by the place available for education.

Challenges of Digital Learning

Hassan (2020) underscores that digital learning may face several challenges, including:

- Lack of computers for both teachers and students.
- Inefficiency of networks and communication tools.
- Lack of funding resources for digital learning.
- Lack of digital libraries.
- Need for teacher training on using and managing learning processes with electronic media.
- Lack of curricula designed for use through electronic media.

Digital Requirements for Talent Management in Egyptian Schools

The intensity of competition, technological development, and the revolution of information have significantly impacted the concept of talent management. Strategies and processes for talent management should leverage this digital advancement to stay updated and more effective. This is the focus of current research aimed at implementing these strategies in Egyptian schools.

To achieve effective talent management in the digital age, several digital requirements must be met. Muhammad (2015) states that to improve the school administrative system and achieve a smooth transition to electronic management, the following prerequisites should be considered:

- Disseminating an electronic culture among employees of educational institutions to alleviate concerns about technology's impact on their interests, such as potential job reductions or decreased incentives.
- Training human resources responsible for the transition to electronic management.
- Considering the special skills required for electronic management, including computer literacy, data entry methods, data retrieval, transfer, and archiving, program management, data protection, follow-up methods, and implementing electronic control.
- Creating the necessary infrastructure for electronic management, including providing computers and modern networks for wired and wireless communications that ensure the transfer of information between administrative institutions and between institutions and individuals.
- Developing legislation and legal frameworks that facilitate electronic management work and provide it with legitimacy and credibility.

Research Procedures

Methodology of the Research

The descriptive approach was used due to its suitability to the nature of the current research. The following steps were taken:

- Studying talent management strategies.
- Studying the requirements of the digital age.
- Surveying the digital practices of talent management professionals in directorates and educational administrations, including planning, talent retention, training and development, and evaluation.
- Developing a proposed framework for talent management in Egyptian schools in light of digital age requirements, including its philosophy, objectives, dimensions, content, and implementation requirements.

Research Sample:

A deliberate sample was selected, comprising 190 talent management professionals in various educational directorates and administrations across nine governorates. The following table shows the description of the sample according to the governorates:

Table (1)

Distribution of the sample according to the governorates of field application

N.	Governorate	Number of Sample Members	Percentage
1	Beni Suif	21	11.1%
2	Qena	19	10%
3	Alexandria	2	1.1%
4	Giza	21	11.1%
5	Sohag	31	16.3%
6	Menofia	8	4.2%
7	Cairo	19	10%
8	Fayoum	15	7.9%
9	Sharkia	54	28.4%
Total		190	100%

Tool of the Research (the Questionnaire)

In light of the problem and the aims of the research, the research team followed several steps to prepare the data collection tool. These steps were as follows:

I. Identifying the Aim of the Questionnaire

The questionnaire aims to identify the digital practices of talent management professionals in Egyptian schools, which will help develop the proposed framework for talent management in light of the digital age requirements. These practices include domains of planning, talent retention and attraction, training and development, and evaluation and follow-up.

II. Identifying Domains of the Questionnaire

Referring to resources, references, educational literature, and previous Arab and foreign studies related to the digital practices of talent management professionals in the Egyptian schools, the research team agreed upon four main domains, subdivided into 36 statements.

III. Identifying the Questionnaire Statements

Based on the main domains identified earlier, through which the digital practices of talent management professionals in the Egyptian schools were categorized, a set of statements for each domain was developed. The statements were discussed in several sessions, during which some were discarded, and others added, resulting in the initial version of the questionnaire.

IV. Description of the Questionnaire in Its Initial version

The questionnaire includes two main aspects:

- First Aspect: It includes the talent specialist's personal data, such as the governorate, the educational administration, their name (optional), the school, and the job.
- Second Aspect: It includes data related to the four main domains of the questionnaire and the 36 statements subordinate to each domain. The four domains are: planning, talent retention, training and development, and evaluation, as outlined in the following table:

Table (2)

Domains of the Questionnaire

Domains	N. of Statements
The First Domain: Planning for talent management,	11
The Second Domain: Talent retention	10
The Third Domain: Training and Development	6
The Fourth Domain: Evaluation and Follow-up	9
Total	36

The Statistical Analysis

The statistical package (SPSS) was used to analyze the data through calculating frequencies, percentages and the correlation coefficient to measure the Internal Consistency Validity and Cronbach's Alpha Coefficient to measure frequencies, percentages and the mean score of responses and rank order to process the data according to feedback of the sample to identify the digital practices that talent management professionals should utilize in Egyptian schools.

Results of the Research Sample Responses on the Total Domains

Domains of talent management were ranked according to results of the research sample responses analysis as outlined in the following table:

Table (3)

The mean of the relative weight and rank order of domains

Domains	The mean of the relative weight	Rank order
The First Domain: Planning for talent management,	2.62	2
The Second Domain: Talent retention	2.66	1
The Third Domain: Training and Development	2.61	3
The Fourth Domain: Evaluation and Follow-up	2.42	4

The table above shows that the second domain, "Talent Retention," ranked first with a relative weight of 2.66, followed by the first domain, "Planning for Talent Management," with a relative weight of 2.62. The third domain, "Training and Development," had a relative weight of 2.61, while the domain of "Evaluation and Follow-up" ranked last with a relative weight of 2.42. This result highlights the necessity of improving the digital practices related to talent management, particularly in identifying and nurturing talented students, their retention, training, development, and performance evaluation, in line with digital age requirements.

To address the third research question, "What is the proposed framework for talent management in the Egyptian schools in light of the digital age requirements?", the proposed framework was developed based on the research results. The framework for talent management in the Egyptian schools, in light of digital age requirements, is as follows:

The Proposed Framework for Talent Management in the Egyptian Schools in Light of the Digital Age Requirements

In light of the research questions, aims, results, and feedback from talent management professionals, the proposed framework was designed to develop talent management in Egyptian schools according to digital age requirements. The five main aspects of the framework are: philosophy of the framework, its objectives, its premises, its content, and the requirements for its implementation. The content of the framework includes the digital practices of talent management in its four main domains: planning, talent retention, training and development, and evaluation and follow-up.

Research Recommendations

Based on the literature review, previous studies, and the research aims, the research team recommends the following:

- Benefiting from the proposed framework to develop talent management in the Egyptian schools and improve their leverage in talent identification and nurturing.
- The necessity of coordination and collaboration between the Educational Activities and Talent Nurture Research Division at the National Center for Educational Research and Development and the General Administration for Gifted and Intelligent Learning at the Ministry of Education and Technical Education (MOE) in implementing the proposed framework.
- Creating an electronic database for talented students across different educational stages.
- Embedding a website for talented and gifted students at the Ministry of Education level, its directorates, and administrations within the Egyptian Knowledge Bank (EKB) website.
- Providing an attractive, stimulating educational environment equipped with the latest technological facilities for identifying, nurturing, and monitoring talented students.
- Developing programs based on digital practices for identifying, nurturing, and monitoring talented students, such as electronic reports, using social media, and systems of electronic learning management.
- Training talent professionals at different directorates, administrations, and schools on digital strategies for talent management.
- Establishing means of communication between MOE officials and the private sector to activate community partnership and provide the requisite support for digital talent management.