The Importance of Training Needs Assessment on E-Education in Government Schools in Basra

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ABSTRACT

In this paper, the relevance of Training Need Assessment (TNA) is examined in relation to the introduction of e-learning in government schools in Basra. E-education, or the use of digital technology to enhance learning, is becoming more and more common in educational facilities all over the world, including Basra. To close the digital gap and assure the adoption of e-education, it is crucial to understand the specialized training requirements of teachers and students.

A mixed method was used in the study to obtain quantitative data and qualitative information from teachers and school officials. The teaching staff's present levels of e-education knowledge, abilities, and attitudes were evaluated using a properly crafted checklist questionnaire. In addition, interviews were performed to learn more about the difficulties in adopting e-education and to find viable solutions.

The study's findings showed shortage in the training required for implementing e-education, indicating a major gap in the training needs assessment.

The evaluation identifies numerous critical areas that need immediate attention and focused training activities, including digital literacy, content production, managing virtual classrooms, and utilizing technology for individualized learning. In addition, educators raised concerns about the incorporation of e-education into the curriculum as well as the absence of institutional support and resources, which add to the gap that has been discovered.

The consequences of these findings highlight the crucial role that training needs assessments play in determining how best to integrate e-education in Basra's public schools. The report advises the creation and execution of thorough training programs specifically designed to meet the needs of educators and administrators. It also offers legislative changes to solve resource and infrastructure issues, creating a favorable climate for the development of e-education.

1. Research Methodology

1.1. Research problem

Teachers are expected to be more knowledgeable, to teach technologically complicated topics, and to meet the rising needs of a diverse student body in today's rapidly changing cultural environment. They must stay up with the technology's quick progress. by integrating technologies with education Additionally, they must engage new audiences and cater to the requirements of a student population that is becoming more and more diverse. One technique for equipping faculty members with the information and skills they need to successfully handle the demands of a changing educational environment and technology innovations is through in-service training and learning experiences.(Zarafshani & Baygi, 2008). this research aims to address the problem of inadequately identifying and managing the training requirements for electronic education in Basra's schools. This problem may manifest in a variety of ways, such as the fact that many principals are not aware of the potential of ICT, which is one of the reasons why its usage in schools has not been effective. a lack of money for programs in this area, a lack of teacher preparation in the use of electronic educational tools, or not knowing the specific training needs for putting electronic education into practice. In order to improve the standard of online education in Basra schools, the research intends to identify these specific problems and provide solutions for dealing with training needs.

The administration of the school has significantly improved as a consequence of the use of ICT, which also helps time-saving management and administrative procedures. School administrators could be more inclined to employ ICT in their day-to-day management of schools if they obtain training in its use. The researcher makes an attempt to appreciate why ICT is not exploited to its full potential in school administration for this reason. he is show that principals need to embrace responsibility for beginning and executing school reforms via the use of ICT in management and make complicated choices to incorporate ICT in school administration. However, little is known about how school leaders use ICT, how they perceive their ICT competence, and how they prefer to learn these skills and understandings; as a result, it is necessary to look into the training requirements for principals in the use of ICT in school management, particularly in township and rural schools.(Malan, 2014)

The absence of training and concurrent shortage of research on how to identify and address the training needs of persons to perform these vital jobs are also serious challenges.

1.   What is the electronic education

2. What are the most important training requirements that must be determined and handled in order to successfully deploy electronic education in schools?

3. In the context of Basra, Iraq, what strategies may be used to satisfy these needs?

1.2. Aim and Objectives of the study

In order to raise the caliber and efficiency of electronic education in the area, this study aims to define and manage the training requirements for schools in Basra.

1. Determine what electronic education is

2. Identify the unique training requirements for school leaders to manage their schools using ICT efficiently.

3. Determine the requirement for training

4. Describe the magnitude of the pedagogical and teacher competences gap and the need for teacher preparation.

5. Ensure that you comprehend the training and education needs of the educational institution.

6. provide a critical analysis of the pedagogical ideas that can be used in teaching and learning;

Objective:

1. to determine the precise training requirements needed for the Basra schools' successful use of electronic instruction.

2. to investigate the difficulties and impediments to effectively identifying and managing the demands for electronic education training in Basra's schools.

3. to provide guidelines for handling the demands for electronic education training in order to raise the caliber and efficiency of this type of instruction in Basra schools.

4. To add to the amount of information already available on E-education in developing nations, notably in the Middle East, and to offer guidance to scholars, educators, and policy makers in this area.

1.3. Study approach:

Using the "case study" approach, which distinguishes a study from another, With the important information's exact complete description, the variety of its aspects, and the potential of its Combining many research methods simultaneously, as indicated by observations and in-person interviews Additionally, the use of checklists, direct observations, and questions was employed to collect the data and information needed by the research in order to meet its predetermined objectives.

1.4. Data processing and analysis tools:

The researcher use checklist and gap analysis The objective is to evaluate the percentage of conformity and ascertain the magnitude of the gap, achieved through the utilization of a five-point scale to gauge the degree of adherence in the actual implementation of the requirements, as outlined below.

Table (1) the gap's size and degree of conformance are assessed using a five-point scale

No	scale paragraph	Paragraph weight (degree)
1	excellent	5
2	good	4
3	suitable	3
4	bad	2
5	Very bad	1

Source: researcher prepare

Calculating the approximate average of the extent of conformity with the requirements to extract the arithmetic mean by calculating the recurrence values for each weighted (Weight Mean) list Examination according to the following equation:

Repeated X total weights U / Total iterations = weighted arithmetic mean (1)

Calculating the percentage of the extent to which actual implementation is met by the organization using the formula the following:

The weighted arithmetic mean, U = the percentage of the extent of congruence/ 5 (highest score on the scale) (2)

Calculating the size of the gap by subtracting the percentages of the extent of conformity from the number (1) and as Come:

Gap size for each checklist = 1 - the percentage of extent of conformity (3)

1.5. Scope of the Study

The study was limited to Basra's public schools, with a focus on educators and the 2022–2023 school year. The study is a qualitative one, therefore it will gather and evaluate data using qualitative research techniques, such conducting interviews.

1.6. Design

The first section of this paper will provide a quick overview of some published research on assessment training need and E-education. Then, an overview of the data gathered from the surveys is given. The examination of the qualitative data that results from this is next presented. In the article's last section, the study's findings are provided.

2. Literature Review

2.1. Introduction

As a result of the quickening pace of technological innovation, education has undergone an unparalleled transition in recent years. E-learning, often known as electronic learning, has become a significant factor in transforming conventional teaching approaches and enhancing educational opportunities. The incorporation of E-education offers a good chance to improve educational quality and close the digital gap among students in the setting of government schools in Basra

It is essential for educational institutions to adapt and include digital technologies into their teaching methodologies as technology continues to pervade every element of contemporary life. Government schools, which are at the forefront of educational innovation, are essential in fostering the intellectual

development of the young people of the country. E-education implementation is not without its difficulties, and overcoming these obstacles successfully is essential to the integration's success.

The thorough evaluation of the training requirements for educators and administrators is one of the major elements influencing the success of the implementation of E-education. In order to create customized training programs that enable teaching staff to successfully use technology in the teaching and learning process, it is crucial to understand the current skill gaps and levels of digital competence. The strategic planning and resource allocation required for the long-term integration of E-education are guided by a thorough Training Need Assessment (TNA), which acts as a road map.

In this paper, we will examine the vital significance of E-education training need assessments in Basra's public schools. It intends to shed light on the possible advantages that such an evaluation might offer to the education system by outlining the opportunities and problems related with the introduction of E-education. Additionally, this study aims to highlight how important it is to provide teachers the digital pedagogy and skills they need in order to create a dynamic and engaging E-education environment. The path to a digitally empowered education system necessitates collaboration and cooperation from a wide range of stakeholders, including legislators, school administrators, educators, parents, and the larger community. By investing in the Training Need Assessment process, the Basra government can set the road for long-term prosperity and guarantee that students have the necessary skills and knowledge to flourish in the digital era.

In the following sections, we will look at the problems that government schools encounter when integrating E-education , the advantages of undertaking a Training Need Assessment, and potential ways for creating a more successful and equitable E-education environment in Basra. As we continue on this road of educational change, it is critical to understand that investment in educator training now will pay returns in the form of a talented and digitally literate workforce capable of shaping the region's and beyond's future.

2.2. What is the E-education?

The advancement of internet technology allowed new player to enter the market without the usual obstacles that older institutions faced.(Chan & Welebir, 2003) might also be viewed as a challenge to develop an active and engaging learning environment that allows students to participate and think critically. (Dias & Diniz, 2014)

According to reports, education will incorporate educational technology into teaching and learning by including instructors and students in the process. In other words, there will be big changes to the way we learn. With the recent modifications, the educational process is distinguished by: (Almelweth & Alkahtani, 2018)

➤ A variety of educational media accessible through information networks.

➤ In order to find information and knowledge, engaged students work together with one other and more seasoned members of the community.

Shifting from "teacher" to "supervisor" and assisting pupils in using new informational tools. - Schools serve as sites for universal learning and are sustainable and accessible to all. - Making use of distant learning strategies that let students study from instructors in other locations.

With the use of a wide range of instructional styles and formats, including synchronous and asynchronous delivery, E-education entails the provision of education using Information and

Communication Technology (ICT). It frequently appears in the same sentence as phrases like "internet-based learning," "online learning," "computer-assisted learning," and "web-based learning." E-education encompasses a wide range of activities, including multimedia, CD-ROMs, webinars, virtual patients, online tutorials, interactive modules with embedded quizzes, and discussion forums.(Lawn et al., 2017)

All types of education enabled by technology are referred to together as "e-learning" in our terminology. E-education is explicitly defined by Brown, Charlier, and Pierotti as "a wide range of applications and procedures that share a common attribute of depending on some sort of computer technology to pro- mote learning.(Bell & Federman, 2013)

a strong effect that technology development has had on the area of education, its structures, and its practices. and the transformation of the conventional function of the teacher into a facilitator and a guide. The lack of knowledge and expertise needed for efficient university instruction should be our main concern. and the progress made in creating training programs in several fields of teaching and learning. To aid in improving the quality of instruction, faculty members must stay current on scientific breakthroughs, The growing student population necessitates a greater reliance on technical advancements. (Abouelenein, 2016)

(Netteland, 2007) define E-education at Telenor by contrasting the following concepts

✓ systematic and scheduled education, not casual or unscheduled education

✓ Learning that is separate from and not included into the job process.

✓ Individual learning – not learning in collaboration with others

✓ Collaborative learning processes, rather than just individual growth

✓ More fundamental learning than issue solving It

Education and training are often provided through organized learning activities including courses, tutorials, lectures, and seminars, which are commonly considered to be the domain of the formal educational sector. The term "development" is considerably broader and frequently used to refer to local economies in connection to regional communities. Yet, there is also the idea of individual growth employed by human resource specialists, as well as the development of groups and teams so they can take on certain tasks or projects. The term "extension" has historically been used to describe "outreach" efforts made by government organizations, notably those engaged in the agricultural and NRM sectors. It frequently refers to the actions of regionally based government employees that collaborate with landowners to promote adoption of new and improved management methods resulting from scientific research and development, Smith (1992: 2) includes the following definitions:

➢ training: a systematic procedure to change behavior, attitude, or knowledge through an educational experience to attain success in a particular activity or set of activities

➢ education: activities that focus on fostering the information, abilities, moral principles, and comprehension necessary in all facets of life rather than knowledge and abilities specific to a certain field of endeavor.

➢ the expansion or manifestation of one's potential via conscious or unconscious learning. (Aslin et al., 2002)

ICTs are seen by E-education as a resource for reorganizing education and a tool to support whole-school growth. ICTs are included as :(Department of Education, 2004)

- ✓ an instrument for management

- ✓ a productivity-boosting administrative tool ;

- ✓ a tool for integrating curricula ;

- ✓ a channel of communication ;

- ✓ a tool for instructors and students to work together; and

- ✓ a setting for learning that fosters involvement, communication, productivity, and creativity.

(Anderson 2002) five essential E-education success elements were outlined in a set of questions. The five C's are this group of variables:(Samra, 2009)

- ✓ Culture - determining whether or not a company's culture is e-learning-ready;

- ✓ Programmers' content;

- ✓ Internal or infrastructure-based capacities;

- ✓ Expense, choices for the activities, and the targeted;

- ✓ Customers or staff

These elements are thought to assist firms in recognizing and resolving a variety of e-learning-related difficulties. Moving from instructor-led to online learning might involve a significant shift in how things are done.

2.3. Training: Definitional Issues?

There are several concept for training need such as needs; training needs , needs assessment; needs analysis; training needs analysis and finally training needs assessment.

(Kaufman, 1994) define need "is the gap between current and desired (or required) results, or (stated another way) the gap in results between 'what is' and 'what should be.'"

(Unesco, 1987) describe training as "Activities that are intended to provide the information, abilities, and attitudes necessary for employment in a specific occupation, a group of related occupations, or for performing a certain role in any area of economic activity. Based on the intent or degree of the training, the trainee's age or other characteristics, the setting where the training is provided, etc., a variety of derivatives or subdivisions within this broad word may be noted".

While (Buckley & Caple, 2009) define training as a planned and systemic effort to modify or develop knowledge, skill and attitude through learning experience, to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to enable an individual to acquire abilities in order that he or she can perform adequately a given task or job and realize their potential.

(Lee, C., Gyu Han, J., & Sang Hoon Shin, 2016) define the needs assessment in education is intended to develop training programs and refers to the state that resolves differences between the required and present levels of learners. While(Ghufli, 2014) display he need assessment as the foundation for the training process. It is the stage where the requirements of an organization are determined, laying the groundwork for a successful training endeavor. The needs assessment identifies where, what, and who training programs are required, as well as the circumstances in which training will take place and the

standards that will be used to evaluate programs.

And (Kraiger et al., 2014) refer for need assessment it's come first in any process for designing training. A continuous data-gathering process known as need assessment identifies the training requirements that must be met before new training can be created to support the organization's goals. To get management support, need assessments are carried out to identify particular organizational issues that may be resolved via training. This is done by ensuring that the training has an influence on managers and their management assistants. provide baseline data for evaluation, and lastly calculate the costs and benefits of training. Without a proper need assessment, firms frequently overtrain, undertrain, or mis-train their staff, rendering efforts either marginally beneficial or entirely worthless.

(Tao et al., 2006) defined need as "a gap between a current set of circumstances and some changed or desirable set of circumstances", and needs assessment as the process of "measuring (as scientifically as possible) or appraising that gap." The word "circumstance" in this definition can be substituted with words such as "proficiency" (knowledge, skills, and attitudes), "performance" or "situation".

The purpose of a need assessment is to answer some familiar questions: why, who, how, what, and when. following the definitions of each type of needs assessment is the common needs analysis term (Barbazette, 2006)

➢ why conduct the training: to tie the performance deficiency to a business need and be sure the benefits of conducting the training are greater than the problems being caused by performance deficiency. Conduct two types of analysis to answer this question (1) needs versus want analysis (2) feasibility analysis.

➢ Who is involved in the training: involve appropriate parties to solve the deficiency. Conduct a target population analysis to learn as much as possible about those involved in the deficiency and how to customize a training program to capture their interest.

➢ How can the performance deficiency be fixed: training can fix the performance deficiency or suggest other remediation if training is not appropriate. Conduct performance analysis to identify what skill deficiency is to be fixed by a training remedy.

➢ What is the best way to perform: there is a better or preferred way to better or preferred way to do a task to get the best result. Are job performance standards set by the organization such as standard operating procedures (SOPs) ? are there governmental regulation to consider when completing the task in required manner? Condact a task analysis to identify the best way to perform.

➢ When will training take place: the best timing to deliver training because attendance at training can be impacted by business cycles, holidays and so forth conduct a contextual analysis to answer logistics questions.

Not all five questions must be answered as part of a needs assessment

(Pathy, 2019) define the Training Needs Analysis (TNA) is a key component of the training system because it identifies the essential training and prevents time, money, and resources from being squandered on ineffective training activities. Building trained, qualified, and capable individuals via training enables firms to enhance performance and adjust to any new development. This is why some prosperous firms spend a lot of money on the function of training and development. However, organizations frequently educate more people than necessary or "waste" their training budgets on the unsuitable candidates. Thus, academics widely agreed that assessing the need for a training program

inside an organization is the first crucial step in designing and executing a training program.

(Rahmana & Sukaya, 2020) emphasize the most crucial aspect of training programs must be TNA. TNA not only guarantees returns on training investments made by enterprises, but also reduces potential mistakes in the training programs. TNA should come before any training initiatives. Three layers of analysis, including organizational, operational, and individual analysis, must be carried out in order to develop training that satisfies the organization and its staff.

Likewise (Vairagi et al., 2018) is employed to calculate the training requirements of a company. The training requirements analysis starts with a gap analysis. This is a comparison of the employees' current knowledge, abilities, and attitudes with what they are acquiring outside the workplace in order to achieve the goals of the firm. Before planning the training process, including budgeting, developing, and performing, this approach is best carried out. The results of the requirements analysis will be recorded in a document with the following information: why, what, who, when, where, and how.

Need assessment is the first phase to identify what employee development is needed, why it is needed, who needs it, and what knowledge, skills, and improved performance will result. Source data for the needs assessment include observation, interviews, survey, and reviews of written document.(Gupta, 2011)

2.4. The importance of training needs assessment

(Rossett, 1987) suggest three reason to why we need TNA :

- ➢ Define the problems: through the TNA we can recognize performance problems which happen in the midst of ongoing efforts in situations when employees ought to know how

- ➢ New system and technologies: we need to teach our people to use the new system to get the benefit from it.

- ➢ Automatic or habitual training: there is no particular problem or new system of technology but the training happens because it has always happened because it look good for it to happen

(Holton et al., 2000) discovered that 1) introducing new programs, 2) addressing performance and productivity issues, and 3) aligning employee performance with business goals are the top three reasons agencies analyse employee training requirements. and describe six purposes of training needs assessment:

- ✓ Trying to find optimal and actuals to identify specific disparities

- ✓ A solid foundation in reality and actual people's perspectives

- ✓ Finding the root causes of an issue

- ✓ Finding thoughts or priorities

- ✓ Obtaining buy-in by involving important stakeholders;

- ✓ Teaching management new ways to approach issues

from viewpoint (Dias & Diniz, 2014) identified the need for rethinking structures within the E-education environment as a means of: I allowing an adjustable and dynamic ecosystem that can integrate various interactive learning activities, (ii) facilitating teachers' ICT acquaintance to foster their intrinsic motivation, and (iii) providing students' training strategies to achieve better learning performance and higher levels of satisfaction.

Benefits of identifying staff training needs(Abouelenein, 2016)

- ✓ Building training plans.
- ✓ Identifying training objectives.
- ✓ Designing training programs directed towards achievement of objectives.
- ✓ Improving training effectiveness.
- ✓ Identifying staff performance problems and difficulties.
- ✓ Involving staff in community service.
- ✓ Helping trainers design programs that satisfy needs of trainees (Chan, 2010).
- ✓ Effective planning of training programs activities.
- ✓ Defining assessment criteria of training programs.
- ✓ Raising efficiency of university education.

(Hung et al., 2013) The research advises employing both informal and formal training strategies. According on the traits influencing learning and transfer results, this study provided the following design principles.

- ➢ Training modules should be distributed through picture-filled materials or readily available media (e.g., DVD or mobile phone).
- ➢ The purpose of a training intervention should be to explain to the employee their role in maintaining workplace safety and to structure their experiences rather than simply imparting safety information.
- ➢ By providing chances for reflection and the exchange of best practices, a training intervention should be created to encourage employees to participate more actively in their education.
- ➢ A training intervention should promote worker involvement in the learning process both actively (e.g., serving as trainers) and passively (e.g., by actively exhibiting safe behaviors in the workplace).
- ➢ A training program should involve regular chats and discussions about safety concerns with employees, especially on the job during breaks, in order to develop corporate safety culture (e.g., lunch time).

In light of these advantages, the current study seeks to determine the faculty training requirements for schools in Basra in order to enhance their knowledge and abilities using cutting-edge technology.

determining the training needs by recognizing the existing and desired levels of performance, establishing the training policies, and designing the training programs to accomplish such policies are all necessary for the efficacy of the training programs. Finding the right instruction is crucial to their success because: (Almelweth & Alkahtani, 2018)

- ✓ It shows that training is correctly supervised throughout the sub-processes.
- ✓ It aids in maintaining a high level of performance and achieving the fundamental objective of training.
- ✓ It identifies the target audience, the necessary training style, and the anticipated outcomes.

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✓ It consumes labour, time, and money due to its neglect or inaccuracy.

training can be divided into three categories as follows:(Abdulsadig, 2010)

✓ Knowledge:

➢ Technical - essential to the work and without which it could not be completed

➢ Context is related to factors that have to do with work.

➢ Background: This refers to information about the organization, its history, and its relationships with stakeholders.

✓ Skills:

➢ Intellectual talents, sometimes referred to as "mental" skills, include creativity and judgment.

➢ Physical activity, usually referred to as "manual," includes coordination and sensory activity.

➢ Interpersonal skills, usually referred to as "social" skills, include verbal communication and leadership.

✓ Attitudes:

➢ The idea of attitudes is very debatable and nuanced. Nonetheless, in plain

➢ Terms and the attitudes people hold might be good or detrimental in the context of the workplace

Training and development are crucial elements of human resource development since they are intended to improve employees' skills, knowledge, and talents for successful careers and organizational growth. Although development prepares for next responsibilities, training concentrates on enhancing present work performance. Benefits from training may endure a person's career and help with future promotions.

While (Alkinani, 2014) summary this benefit as following:

✓ Improved skills and knowledge for employees

✓ Improved employee performance

✓ Improved employees' morale

✓ Good reputation for organization

✓ Reduced anxiety or frustration for employees

✓ Improved work stability

✓ Increased job satisfaction for employees

✓ Improved ways of satisfying customers' needs

✓ Increased value of employees in the labour market

✓ Individual career benefits for employees Increased self-efficacy

✓ Enhanced productivity, quality, creativity and innovation

✓ Reduced costs of operations for organizations and increased profitability

✓ Improved competitive advantage for organizations

✓ Improved employees' loyalty and commitment

✓ Improved organizational performance

It is obvious that training aims to improve a certain set of abilities required for the present work, whereas development encompasses learning relevant to future employment. Although development helps prepare people for future roles in the firm and increases their capacity to move into occupations that may not yet exist, training helps individuals perform better in their existing positions. Also, because training is for the position being held, participation in training sessions is essential, and growth may be required for workers who have been identified as having management potential. It may also be claimed that training and development are essential to an organization's operations and that they must work together to support the organization's holistic growth.(Affum & Baidoo, 2021)

Identification of training needs as stated by Rossett (2009), Hariyo (2013) and Christensen (2016) is a process of collecting data in order to identify areas or any factors that need to be repaired or enhanced through training. Training needs identification is the process of collecting data to pinpoint areas for improvement. It can be done on a micro or macro level. Training institutions use a micro approach to identify gaps in competencies between labour force/participants and job market requirements his can be done by:

➢ To assess if training requirements should move up the priority scale, it is necessary to gather performance data from each division and department that might have an impact on the organization's overall performance, goals, and business strategy;

➢ at the level of the Office, to gather task information and specifics of the responsibilities of a job well in advance of the present or expected future, then determine the link or correlation between tasks and information from the Office of the relevant;

➢ An individual-level training requirements analysis compares the participant's present knowledge, abilities, and attitudes to the necessary level, finding gaps and necessary competences. Outcomes are not limited to training; they can also trigger office remodelling, counselling, and other reactions.(Sunyoto et al., 2020)

2.5 Approaches and methods conduct training needs assessment:

(Zarafshani & Baygi, 2008) viewed efficiently asses the member organizations' training needs. The suggested model has the following key components:

➢ Plan ahead. Included are all the preliminary actions needed to set up the T&DNA system at the partner institute

➢ Techniques and procedures for collecting data. includes creating tools and methods for gathering data and information about the member organizations' requirements in terms of training.

➢ Establish a cycle for collecting data. This illustrates the fundamental actions that will be taken to carry out the procedure. Along with all other member organizations, it includes the partner institute.

➢ Implementation. The requirements assessment process is really being carried out at this point, and it covers things like resource allocation, timing, and scheduling.

➢ Plan generation and data analysis. This task involves evaluating a data analysis method that might make it easier to analyze and draw inferences from the data. It also involves creating a plan for the institute's training and development.

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➤ Evaluation and criticism. The evaluation method should make it clear how the results are assessed in terms of whether real training and developmental needs—as opposed to wants—have been determined. The appropriate feedback actions necessary for information distribution inside the system are also included.

(Burban, 2016) discuss the start of TNA with three-phase process:

✓ Gather information,

✓ Analyse information and

✓ Create a training plan that offers to resolve the performance deficiency.

In the creation of a competency-based training paradigm, it is necessary to determine the gap between the employee's certificate of competence and the expected performance (identify desired result). So there are various 2.5 Approaches and methods of performing a TNA, the most common of which include: (Sunyoto et al., 2020)

➤ Macro: based on the requirements of organizations/companies generally, so findings are applicable to everyone in it. Hence, it is sometimes referred to as the Organization-Based Analysis. And data sources can employ include: (a) the target company's vision, purpose, and strategic goals; (b) the company's economic and financial situation; (c) cultural change; (d) technological advancements; and (e) corporate themes like cost cutting, quality enhancement, etc.

➤ Micro: Task-Based Analysis (TBA), whose major goal is to determine if the quality of abilities necessary in a job are already acquired by the employee or not, is based on the demands of a specific group that consists of two. (B) The Person-Based Approach, in which his major concern is whether or not personnel can already perform the required tasks. Data sources that TNA Micro may employ include: (1) Job Descriptions; (2) Performance Standards; (3) Performance Evaluations; (4) Workplace Observations; (5) Interviews; (6) Questionnaires; and (7) Checklists.

➤ involves gathering information in order to pinpoint any elements or places that require training to be improved or fixed. Both macro and/or micro levels of training requirements can be identified.

to discover the gaps or "gap" competence possessed by the labour force/potential participants with market needs work or the requirements of the post. TNA is a step taken after determining the target outcome. and before performing any training and are part of integrated designing training to gain a full understanding of the material, the allocation of time, and learning methodologies that should be utilized in training Organization in order to be helpful for training participants. The Organization cannot select training without first examining the organization's requirements and goals. The needs assessment serves as a road map to the organization's purpose (s).

While (Hassan Padzil, 2005) explain the methods to identify training need through define (training need (training gap, training process), training design, training Implementation, Training Evaluation)

✓ Training Needs and Training Needs Analysis (TNA)

✓ Training 'Gap'

TNAs are the diagnostic component of the entire training process, and Anderson (1994), Bentley (1991), IES (1995), Reid and Barrington (1999) all concur that this is true. Without TNAs, there can be no reliable prognosis to show if the entire training process is properly planned. Training needs analysis (TNA) is the attempt to close the gap by simply identifying what needs to be learned. In the context of

training, the phrase "training need" means that there is something missing or there is a shortage somewhere. Although the idea of the "training gap" was generally agreed upon, the term "performance" was defined in several ways in the training literature.

➤ TNA processes

TNA includes the processes of (i) determining the scope and depth of training needs based on business needs; (ii) clearly defining the needs; and (iii) analysing the most effective ways to address training needs.

➤ Who and what should participate?

When it comes to competency-based training, the manager is often the one to determine the training needs, ideally through interactions with the trainees in question.

➤ Training Design

The Planning step is followed by the design stage of the training process, which leads to the implementation stage. There are five phases to the design of a structured training program, and they are as follows:

✓ review of training objectives;

✓ determine learning activities;

✓ assess training times;

✓ construct the training time-table;

✓ briefing the trainers and the organisation, and preparation of training materials.

➤ Training Implementation

Training can be implemented in various ways, using internal or external providers. Anderson (1994) suggests the training plan and policy as primary sources of information. Cost-effectiveness should inform the decision to use internal or external providers, as advised by Anderson (1994). Bee and Bee (1995) recommend tendering for external training providers.

➤ Training Evaluation

Evaluation is the assessment of a training program's social and financial value, beyond just the achievement of its objectives, as commonly defined by the Department of Employment. (Bee and Bee, 1998; Anderson, 1994; Johnson, 1997; Bramley, 1996).

2.6. Challenges in conducting training needs assessment

Despite its significance and advantages, TNA has gotten more lip attention than actual implementation. Several factors contribute to this(Schneier et al., 1988):

✓ Poor preparation and insufficient time for a TNA;

✓ lack of knowledge about performing a TNA;

✓ management scepticism regarding a TNA's efficacy;

✓ Training follows trends, and the tactics employed are frequently those that are popular at a specific moment.

(Aslin et al., 2002) discusses barriers to training under three headings:

➢ economic variables, such as lower margins, which make investments that don't seem to provide profits right away less important.

➢ structural factors: the size, operation, and kind of small firms' workforces

He identified problems that affect implementing TNA in Arabic countries and these problems or barriers include:(Alkinani, 2014)

✓ Lack of money

✓ Lack of expertise

✓ Lack of job descriptions

✓ Unsystematic approaches to training

✓ Lack of employees' interest in any development programmes

✓ Lack of top management support

✓ Wasting time and money

✓ While (Bin Othayman et al., 2022) discuss many challenges face TNA such as:

✓ A lot of organizations do not prioritize TNA.

✓ A lack of clarity for what is TNA and important for organization.

✓ The managers who are in charge of determining training requirements are frequently not specialists and are underqualified to carry out their duties.

✓ As performance records are influenced by relatives' nepotism, and personal ties between managers and employees, it is possible that managers' assessments of training requirements are inaccurate.

✓ Due to a lack of credible information and unstable political, economic, and social situations, there are no standardized protocols for identifying training and educational needs.

✓ the absence of precise job descriptions and performance evaluations, as well as the assertion that impressionistic and generalized rather than methodical methods are frequently utilized to determine an employee's need for development.

✓ Many training programs are not handled equitably and are cantered on testing and errors rather than recognizing requirements.

✓ Many organizations do not adequately and fully adopt TNA because they consider the analysis of training requirements to be costly and time-consuming.

3. Research Methodology

Statistical population, sample size and methods: The study population consisted of all high school manager during the school year 2022-2023 where they 114 managers and teachers. Sample size: due to continuous measure scale and two domains research hypotheses in the 95% confidence level, the sample size based on Cochran formula (Cochran 1977) was 88 persons. These people all work in the field of e-education, and they view the Internet as a way to provide their students more services. (Ahghar, 2012)

Equation 1: Cochran formula $=\dfrac{Q^2 . Z_{1-a/2}^3}{d^2}$ (4)

This study employed a standard assessment questionnaire to examine the hypothesis, and the content of the questionnaire was completed based on the research hypothesis and the data gathered from the research literature review.

Table (2) The Dimension 1: tangible physical aspects based on checklist

No	Dimension of training need	excellent	good	suitable	bad	Very bad
	Dimension 1: tangible physical aspects					
1.	the school provided with internet			✓		
2.	the school provided with hardware and software			✓		
3.	The school provided with E-learning means from the data show screens and the electronic whiteboard				✓	
4.	E-learning facilities are friendly and attractive to students			✓		
	weight	5	4	3	2	1
	repeated	0	0	3	1	0
	result	0	0	9	2	0
	mean	2.75				
	The percentage of compliance	55%				
	Size of gap	45%				

Source: researcher prepare

Table (3) The Dimension 2: human resource

No	Dimension of training need	excellent	good	suitable	bad	Very bad
	Dimension 2: human resource					
1.	Teachers have an appropriate foundation of education, training, skills and experience		✓			
2.	the teacher recognizes the need for the training program and understand its objectives			✓		
3.	The ability of the teacher to convey the information			✓		
4.	The ability of the teacher to manage electronic means in the educational process			✓		
5.	The ability of the teacher to find solutions to the problems that			✓		

hinter the educational process					
weight	5	4	3	2	1
repeated	0	1	4	0	0
result	0	4	12	0	0
mean	3.2				
The percentage of compliance	64%				
Size of gap	36%				

Source: researcher prepare

Table (4) The Dimension 3: training program

No	Dimension of training need	excellent	good	suitable	bad	Very bad
	Dimension 3: training program					
1.	Modern methods of training are used				✓	
2.	The training material is clear			✓		
3.	The training material develops knowledge and skills			✓		
4.	The training program contributes to the acquisition of behavioural skills in addition to the technique that raises the level of performance					✓
5.	receive technology training Self-paced online courses or modules					✓
6.	management takes utmost care of employees training				✓	
7.	the newly recruited teachers undergo well-structured induction training to accommodate the e-education setup					✓
8.	There is a Training program properly designed and scheduled				✓	
9.	There are many obstacles when face using e-education platforms				✓	
	weight	5	4	3	2	1
	repeated	0	0	2	4	3
	result	0	0	6	8	3
	mean	1.8				
	The percentage of compliance	37%				
	Size of gap	62%				

Source: researcher prepare

First: result of survey the gap:

Prepared the checklist for every dimension (tangible physical aspects, human resource, training programs) the researcher made many field trips For the purpose of observation, conducting interviews, reviewing the reality of the application of e-education, and evaluating the training needs of the application, A number of results were reached, as shown in the tables (6).

Table (6) the final result of analysis gap

No	The dimension	Sub item				
		item	mean	The percentage of compliance	Size of gap	as the gap rate for each major item
	tangible physical aspects	1-4	3	60%	40%	45%
		2-4	3	60%	40%	
		3-4	2	40%	60%	
		4-4	3	60%	40%	
	human resource	**2-1**	4	80%	20%	36%
		2-**2**	3	60%	40%	
		2.3	3	60%	40%	
		2.4	3	60%	40%	
		2-5	3	60%	40%	
	training program	**3.1**	2	40%	60%	62%
		3.2	3	60%	40%	
		3-**3**	3	60%	40%	
		3.4	1	20%	80%	
		3.5	1	20%	80%	
		3.6	2	40%	60%	
		3.7	1	20%	80%	
		3.8	2	40%	60%	
		3.9	2	40%	60%	
Total gap						47%
Total percentage of compliance						52%

Source: researcher prepare

second: discussion the result:

Data and information in Table (6) indicate that each of the three dimensions is influenced by the gap size, as follows:

Dimension 1: tangible physical aspects {mean=2.75, percentage of compliance= 55%, gap rate= 45%}

Strong point:

✓ The school provided with computer and internet and many tools like data show and monitor

✓ Student were attractive with use them

✓ School provided with camera

Weak point:

✓ PCs are mostly old-fashioned and didn't work well

✓ As the lesson progressed, the internet was very slow and took several minutes to load which effect very bad on the application

Dimension 2: human resource {mean=3.2 , percentage of compliance= 64%, gap rate= 36%}

Strong point:

✓ The skills, knowledge of teachers are appropriate

The training program's objectives are understood and its need is recognized

Teachers' ability to manage electronic devices in the classroom

Weak point:

✓ lack of awareness of how important it is to train and improve their skills

Dimension 3: training program {mean=1.8 , percentage of compliance= 37%, gap rate= 62%}

Strong point:

✓ Awareness of Training requirements: By performing the analysis, the teacher or trainers have proven a commitment to understanding training requirements. In the future, this insight may lead to more targeted and successful training approaches.

Weak point:

➢ Lack of online courses causes some teachers to struggle to keep up or feel disinterested since they are required to respond to unique learning styles and demands.

➢ Obstacles that might be encountered when using e-education platforms could be another weak point. Technical challenges, internet access issues, or trouble navigating the platform might impede learning and irritate participants, which can negatively affect their entire learning experience.

➢ Lack of planning for training program.

➢ Lack of interest on the part of the administration in providing training program for new or continuing teacher.

Fig. (1) The size of gap for training need
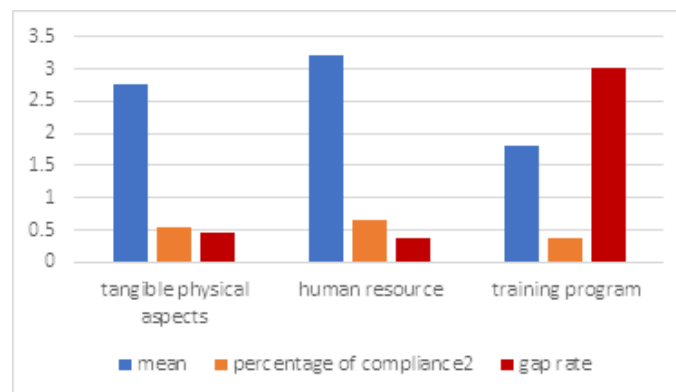
Source: researcher prepare

According to the statistics shown in Figure (1), there is a glaring lack of progress being made in the design and execution of training programs and human resource development. This demonstrates the urgent need for a greater focus on developing training programs and explaining to educators the importance of such programs in enhancing their abilities. It is essential to create a training program that is in line with the goals and expectations of the educational institution in order to allay these worries, and to maintain open lines of communication with instructors on the availability of training opportunities. Additionally, it is crucial to evaluate the training program's efficacy and reward teachers who meet their training objectives. It is crucial to consider instructors' unique learning styles and preferences while designing the program in order to enhance its effectiveness. These recommendations can help educational institutions create a training and development program that is successful, interesting, and advantageous to both instructors and the institution as a whole.

4. Recommendation

Here are some recommendations based on the information given to solve the significant gap in Basra schools and give top priority to training requirements in order to support e-learning:

1. Development of infrastructure:

➢ enable easy access to E-education platforms

➢ enhance and increase internet connectivity in Basra schools.

➢ Enhance the technical infrastructure by offering the tools, such as PCs, tablets, and instructional software, that are required to support e-learning.

2. Programs for Training:

➢ To improve instructors' and educators' digital literacy and abilities necessary for efficient E-education delivery, provide extensive training programs for educators.

➢ Organize workshops and seminars to introduce instructors to various E-education resources and platforms so they may utilize them to improve their teaching techniques.

3. Content development:

➢ Create dynamic, high-quality digital learning materials that follow the curriculum and are tailored to the requirements of Basra schools.

➢ Create E-education resources that are interesting and appropriate for the local culture by working with local educational institutions, professionals, and content providers.

4. An inclusive and accessible approach

➢ Make ensuring that E-education resources and platforms are usable by students with disabilities and those from underrepresented groups.

➢ Implement initiatives to close the digital gap, such as giving students who can't afford them gadgets and internet access.

5. Student Assistance:

➢ Create online assistance programs for students, such as virtual mentorship or tutoring services, to help them with their study and offer direction.

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➢ Encourage peer-to-peer engagement and teamwork through online discussion boards or virtual study groups to build a feeling of community.

6. Monitoring and Evaluation:

➢ Assess E-education projects' success on a regular basis, and make any adjustments to your plans in light of student, teacher, and parent input.

➢ Track student development and engagement to spot areas that need more help or development.

7. Resources and Partnerships:

➢ To get more financing and resources for E-education programs, seek collaborations with governmental agencies, NGOs, and commercial groups.

➢ Collaborate with neighbourhood establishments and neighbourhood groups to offer sponsorship for or contributions of gadgets and internet access.

8. Development of one's profession continuously:

➢ To keep up with the most recent E-education trends, techniques, and technology, encourage instructors and educators to pursue continuous professional development opportunities.

➢ By using online forums or professional learning communities, provide instructors the chance to share their insights and best practices.

9. Innovation and research

➢ Support E-education practices research and innovation to keep Basra schools' digital education programs as effective and high-quality as possible.

➢ Encourage partnerships between academic institutions and IT firms to look into creative answers to E-education problems.

➢ By putting these suggestions into practice, we can address the critical demand for E-education and close the achievement gap in Basra schools. For these steps to be implemented successfully, a thorough strategy including all parties is essential.

5. Conclusion

In summary, the Training Needs Assessment (TNA) on e-education carried out in government schools in Basra has revealed significant insights that need more attention and action. The results highlight the urgent requirement to focus and invest in training programs in order to raise the standard of e-learning in these institutions. The TNA's findings should serve as a wake-up call for the Basra community of e-education, asking them to fix the highlighted issues and take use of the available opportunities. We can create a future where every child has equitable access to excellent education and is given the skills, they need to succeed in a world that is becoming more and more digital by jointly investing in training and allocating the required resources. This concentrated effort will not only change the educational environment in Basra but will also promote the general development and advancement of the whole area.

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