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The impact of continuous professional development on the development of pedagogical practices among educational staff in Pioneering Schools

Abderrazzak MAZOUAK¹, Maryam NADIR², Aziz MOUMEN³

¹Regional Center for Education and Training Professions –Fez–Meknes Region, Fez, Morocco

²Kenitra Institute of Sports Professions, Morocco

³Regional Center for Education and Training Professions –Fez–Meknes Region, Fez, Morocco, and Hassan II University of Casablanca, Morocco

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ABSTRACT

This study examines the impact of continuous professional development on the improvement of pedagogical practices among educational staff working in Morocco's Pioneering

Institutions. Within the framework of ongoing educational reforms, the research focuses on the contribution of professional training to teachers' competencies, classroom effectiveness, and the implementation of innovative teaching approaches, particularly Teaching at the Right Level (TaRL) and explicit instruction. The study adopts a descriptive and

analytical approach, combining quantitative data collected through questionnaires with qualitative insights from focus group discussions and field observations. The research involved 200 educational staff members from primary schools located in the regional directorates of Taza, Taounate, Moulay Yacoub, and El Hajeb, within the Fez-Meknes Regional Academy of Education and Training. The findings indicate that continuous professional development contributes to strengthening teachers' professional knowledge, improving their pedagogical competencies, and supporting the implementation of learner-centred teaching practices. In particular, 60% of respondents reported significant improvements in their professional knowledge following training, while 70% benefited from training covering both TaRL and explicit teaching approaches. Nevertheless, the study identifies several challenges, including disparities in training duration, variations in training conditions, and differences in participants' satisfaction with the programmes. The research highlights the importance of sustained professional support, needs-based training, and systematic evaluation to enhance the effectiveness of continuing professional development. It concludes that strengthening professional development mechanisms is essential for improving pedagogical practices and supporting the successful implementation of the Pioneering Institutions reform in Morocco.

Keywords: Continuous Professional Development; Pedagogical Practices; Pioneering Institutions; Teacher Training; Teaching at the Right Level (TaRL); Explicit Teaching; Educational Reform; Professional Competencies; Quality of Education; Morocco.

Introduction

In recent decades, the education and training system in Morocco has undergone a continuous series of far-reaching reforms, aimed at building a new school system capable of responding to societal and epistemological changes, and of realising the principles of quality, equity and equal opportunities. Since the adoption of the National Charter for Education and Training (1999), it has been emphasised that teachers are the cornerstone of any reform process, and that improving the quality of learning depends on the professional development of educational staff and the enhancement of their professional competences through initial and continuing professional development.

This approach was reinforced in the Emergency Programme (2009–2012), which made supporting teachers' professional capacities a central priority for achieving a 'school of success', before the reform vision was renewed within the

framework of the Strategic Vision 2015–2030, which clearly stipulated the need to revitalise the education and training professions and to improve the management of career paths for those working in the sector.

In light of this reality, the Pioneer Institutions emerged as spaces for piloting a new model of ongoing professional development, based on practical experience and continuous field support, where training pathways are adopted that aim to equip teachers with the skills to diagnose learning difficulties and adapt teaching to learners' actual levels – teaching according to the appropriate level (TaRL), alongside the development of skills in clear planning, formative assessment and explicit teaching strategies that focus on clarification, progression and self-reflection.

This topic arises within a national context aimed at reshaping the image of the Moroccan school, by transforming it into a space that fosters skills and lifelong learning, and a school capable of constantly renewing itself by drawing on the expertise of its staff. Hence the importance of addressing the issue of measuring the impact of continuing professional development, not only as educational research but also as a mechanism for evaluating public education policies and recognising the value of professional development efforts for teachers, as they are the key actors in achieving the desired quality.

Continuing professional development is one of the fundamental pillars for developing the competencies of educational staff and enhancing their professional performance within educational institutions, particularly in the context of the successive educational reforms currently taking place in the Moroccan education system. **The 'Pioneering Institutions'** project stands out as one of the most ambitious initiatives aimed at enhancing learning outcomes and improving classroom practices by supporting the professional development of educational practitioners and creating a teaching and learning environment based on the principles of quality and efficiency.

To what extent is the continuing professional development provided to educational staff under the 'Institutions of Leadership' project effective?

Through this research, we aim to:

- **To contribute to the enrichment of educational literature** by analysing the relationship between *continuing professional development* and the development of *pedagogical practices* among educational staff, within the framework of **the**

‘Pioneering Institutions’ project, which is considered an advanced reform model within the Moroccan education system.

- **To elucidate the impact of continuing professional development** on the improvement of pedagogical practices within the Pioneering Institutions, whilst identifying **the challenges and constraints** that hinder the effective implementation of the project and the achievement of its objectives, and to put forward **practical proposals and recommendations** that will help overcome existing difficulties and support the quality of implementation.
- **To provide scientific data and information** to assist decision-makers and educational supervisors in **evaluating the effectiveness of continuing professional development programmes**, thereby enabling improvements to their content and delivery methods to enhance the performance of educational staff and strengthen their professional competence.

1. Theoretical Framework

1.1. First: Pioneering Institutions

1) Definition of a ‘pioneering institution’:

A pioneering institution is an educational experiment amongst the many others that have been part of the Moroccan educational system over the decades. It emerged within a broader context aimed at adopting modern curricula, teaching methods and objectives based on the available technological advancements, centred on a range of elements including effective and interactive learning, the integration of technology to support the teaching and learning process, and the provision of a suitable and stimulating educational infrastructure and environment.

The ‘Pioneering Institutions’ initiative is also an educational project in which public education institutions have participated on a voluntary basis, with a view to rolling it out widely to ensure the quality of teaching, learning, administration and management; to improve the school environment; to raise the level of mastery of core subjects; and to reduce rates of school dropout and wastage. The procedure for the participation of the aforementioned institutions in this project, with a view to obtaining the ‘Pioneering Institution’ label, is set out in a decision by the government authority responsible for national education. The ‘Pioneering

Institution’ label is awarded to institutions participating in the ‘Pioneering Institution’ project in two stages:

- **Stage 1:** Institutions applying for this label are subject to an objective assessment in accordance with procedures laid down by a central committee for the award of the ‘Pioneering Institution’ label to the institutions concerned;
- **Stage Two:** Based on the assessment carried out in Stage One and the reference guide it has drawn up, the Central Committee is responsible for awarding the ‘Pioneering Organisation’ label.

The ‘Leadership Institutions’ project has been designed in accordance with an integrated framework ensuring coherence amongst four structural components addressing the three pillars of the 2022–2026 Roadmap, which are implemented simultaneously as part of a single package designed to enhance pupils’ mastery of core learning outcomes. These components are as follows:

- **The first component: of a remedial nature**, it involves strengthening educational support activities in primary schools by adopting a level-appropriate teaching approach (TARL), in two forms: integrated support during school hours, alongside the provision of resources, and additional educational support outside school hours as required; with the aim of addressing pupils’ fundamental difficulties in reading in Arabic, French and arithmetic.
- **The second component: a preventative dimension**, which involves institutionalising effective classroom practices during the resource provision phase; it aims to build and consolidate learning progressively. Pupils do not move on to the next stage of the lesson until it has been confirmed that all pupils have mastered the previous stage.
- **The third component: of an educational and organisational nature**, is based on subject-specific teaching to ensure maximum use of learning time and of teachers’ interests and skills. This component remains optional, depending on the specific circumstances of each educational institution.
- **The fourth component: of a practical and logistical nature**, it concerns the maintenance of the institution’s indoor and outdoor spaces to make them more attractive and conducive to sustained performance.

2) The context of the ‘Pioneering Institutions’ project in Morocco:

The adoption of the ‘Pioneering Institutions’ project in Morocco did not come out of nowhere; rather, it was a response to an urgent need for a profound and comprehensive reform of the state school system, in light of the challenges facing the education system in terms of poor academic achievement, as well as wastage and school drop-out rates. The project embodies the state’s strong commitment to bringing about a qualitative transformation by implementing the provisions **of the Strategic Vision 2015–2030**, which stipulates the need to enshrine the principles of equity and equal opportunities and to provide quality education for all, regardless of their social or geographical circumstances.

This project forms part of the implementation of the programme of projects to roll **out the 2022–2026**, which seeks to define the characteristics of the desired state school system through a participatory approach that meets the expectations of learners, their families and educational staff. It also aims to accelerate the pace of educational reform by adopting precise and measurable targets for 2026, it focuses on improving and monitoring the quality of basic learning, strengthening pupils’ capabilities, and reducing school drop-out rates and wastage. This is to be achieved through the adoption of modern pedagogical methods and approaches that enhance effectiveness and take into account individual differences among learners.

In light of the findings of various national and international assessments, such as the PISA, TIMSS and PNEA reports, which revealed that pupils’ mastery of basic learning was weak, particularly in core subjects such as reading, mathematics and science, with a large number of them failing to reach the minimum proficiency threshold.

Consequently, the ‘Pioneering Institutions’ project was developed and finalised as a national initiative to reform the education system, aiming to overcome all identified shortcomings and achieve a proficiency rate of over 70 per cent of learners mastering core learning outcomes.

3) Objectives of the ‘Pioneering Institutions’ project:

The main objectives of the project can be summarised as follows:

- a. **Improving basic learning:** Enhancing pupils’ proficiency in reading skills in both languages (Arabic and French) and numeracy through the adoption of modern teaching approaches such as

Teaching According to Readiness Level (TaRL), which focuses primarily on addressing pupils’ learning difficulties.

- b. **Reducing school drop-out rates:** reducing drop-out rates, which have reached alarming levels in some areas, particularly in rural and marginalised communities. Promoting educational continuity by providing tailored educational support programmes and psychological and social support to address external factors leading to drop-out (poverty, early marriage, early entry into the workforce, etc.).
 - c. **Developing pupils’ holistic skills:** Fostering cognitive, practical and emotional competencies, whilst promoting independence and creative thinking to enable pupils to meet the challenges of the future.
 - d. **Empowering teachers:** Enhancing the professional competencies of educational staff through continuous, accredited training programmes focusing on modern teaching methodologies, classroom management and dealing with diversity in pupils’ abilities, whilst providing the latest pedagogical and technological tools to improve classroom practices (such as smartboards and digital platforms) and modern educational resources.
 - e. **Improving the educational environment:** Equipping educational institutions with appropriate infrastructure, including improvements to classrooms, sanitary facilities, security, hygiene and equipment. Strengthening communication with families and the local community to create a supportive learning environment.
 - f. **Establishing a pioneering educational model:** Building effective public educational institutions that combine quality, equity and sustainability. These institutions meet the aspirations of pupils, families and educational staff by adopting a participatory approach to ensure integration and sustainability.
 - g. **Achieving the Sustainable Development Goals:** Contributing to the development of educated and qualified generations capable of supporting economic and social development in Morocco.
- ## 4) Teaching approaches adopted in pioneering institutions:

The teaching approaches adopted are one of the key factors that distinguish Al-Riyada institutions from other public

institutions. These approaches aim to improve the quality and effectiveness of education and enable pupils to better master the essential skills and knowledge required.

a. The ‘Teaching at the Right Level’ approach.

The ‘Teaching at the Right Level’ (TaRL) approach is one of the methods implemented in the ‘Pioneering Institutions’ project, which aims to overcome learners’ learning difficulties. This approach was adopted by the Indian non-governmental organisation **Pratham**. It is based on the **CaMaL** methodology, which comprises a set of structured, integrated activities designed to develop learners’ basic reading and numeracy skills. It is based on **the principle of ‘active learning’** as an educational approach that aims to make the learner a positive agent in the teaching and learning process. It encourages self-directed learning and the acquisition of learning skills through research, experimentation, the development of critical thinking and problem-solving abilities, and the enhancement of collaborative working skills. The TaRL approach works to develop a range of skills in learners, including:

- **Cognitive skills:** these are skills relating to reading, writing and numeracy;
- **Functional skills:** these include time management, decision-making, working in groups,

b. The Explicit Teaching Approach.

The ‘explicit teaching: l’enseignement explicite’ is regarded as a preventative approach, complementing its predecessor, ‘TaRL’ (Teaching According to Level), which is a remedial approach. Explicit teaching, also known as active teaching, is an educational approach based on the direct articulation of objectives and knowledge, with the teacher playing an active role in guiding the learning process. It emphasises that learning requires active involvement on the part of the teacher and clear guidance for learners. In this approach, the teacher’s role is central, as they lead and organise the lesson and guide learners towards achieving the learning objectives.

Explicit teaching, founded by the researcher **Seifried Engelmann** and developed by **Barak Rosenshein**, focuses on gradually guiding learners towards independence by presenting clear topics and skills. This approach helps to reduce cognitive load by separating the learning of procedures from the instructional content, thereby facilitating practice and enhancing learners’ confidence and ability to respond independently.

It focuses explicitly on the learning content and skills taught by the teacher. However, this model also incorporates other approaches such as discovery learning, collaborative learning and reflective practice.

1.2. Secondly: Assessment, evaluation and measurement

1) Assessment (évaluation):

Assessment is an important and essential process in the field of education; it is not limited to examinations and the marking of pupils’ work, but encompasses every aspect of the educational process, including curricula, teaching methods, staff training, educational management, buildings, facilities, resources, equipment, examinations and so on.

Educational evaluation is also a mechanism of great importance and necessity for educational management and leadership; it is a deliberate and necessary process through which those responsible for supervision and development ensure the quality and evaluation (Valorisation).

The distinction between ‘evaluation’ and ‘assessment’ has sparked considerable debate in the field of education; whilst some advocate for ‘evaluation’, others consider the term ‘assessment’ to be more precise and accurate. Both terms ultimately convey the concepts of appraisal, valuation, measurement, adjustment and correction. It may be that ‘evaluation’ predates ‘assessment’ in terms of origin and usage, as we find that Max Weber had already used it in his writings, and the same is true of John Dewey, who linked evaluation to passing judgement on actions and values. Evaluation means assigning a value to something; one might say, ‘I evaluated the thing’, meaning ‘I determined its value and assessed it’. It therefore does not go beyond determining the value of the thing to be measured, with the aim of making quantitative judgements that are often based on conjecture.

2) Measurement:

The concept of measurement in education: it is **a process that relies on gathering information in order to quantify things in the light of a specific unit of measurement**. Or: it is the process by which we determine the quantity of a particular property or characteristic present in the thing being measured.

In the field of education, measurement refers to assessing the effectiveness of educational management strategies and objectives, with their various components, through the use of methods and tools such as observation, interviews, tests, surveys, questionnaires, checklists, rating scales, records and others.

- Thus, from all of the above, we find that there is a close relationship between **assessment, evaluation and measurement**, and that there are differences between these terms: assessment encompasses evaluation and measurement, whilst the latter leads us to evaluation. This means that each of the three processes leads to the one that follows it and assists it in successfully and accurately fulfilling its tasks.

1.3. Thirdly: Continuing Professional Development

Continuous professional development is defined as the sum of systematic activities aimed at developing the professional and personal competencies of working individuals, with a view to improving their performance and aligning their capabilities with technical and organisational developments in their field of work. This concept is based on the philosophy of lifelong learning, which emphasises that training is not limited to a specific period of time, but extends throughout a person's career.

David Kolb views continuous professional development as a learning process based on experimentation, interaction and experience, whereby knowledge is constantly reconstructed through practice and reflection. In the field of education, it is regarded as a tool for renewing classroom practices and improving the quality of learning, by equipping teachers with new pedagogical and didactic skills that are in line with developments in curricula and approaches.

Continuing professional development is one of the key strategic components of any modern education system, as it serves as a dynamic mechanism for renewing professional competencies and enhancing the educational performance of teaching and administrative staff. In light of the rapid changes taking place in contemporary societies, training is no longer a limited period preceding entry into the labour market, but has become a continuous process that accompanies the individual throughout their life, in line with the philosophy of 'lifelong learning' advocated by international reports on education

Theoretical Backgrounds to Continuing Professional Development:

Continuing professional development is based on a number of **theoretical frameworks** that have formed the basis for its conception in the field of education:

1. **The theory of lifelong learning:** which posits that learning is a continuous process that accompanies individuals throughout the various stages of their lives, and that education is no longer confined to school alone but extends to all spheres of life.

2. **Constructivism:** This theory emphasises the construction of knowledge based on the learner's (or trainee's) experiences, making continuous professional development a space for the exchange of experiences and for individual and collective learning within professional practice.
3. **Competence-based approach (Approche par Compétences):** Continuing professional development is viewed as a pathway to developing professional competences through reflective practice and the resolution of real-world problems within the classroom.
4. **Organisational Learning Theory:** The educational institution is regarded as a learning entity that develops through continuous training programmes which reproduce professional knowledge and foster a culture of collaboration and innovation.

B: Objectives of continuous professional development in the education and training system

In the field of education, continuous professional development is of particular importance as it is directly linked to the quality of learning and to the school's ability to adapt to the needs of society and knowledge:

1. Improving teachers' educational and professional performance
2. Supporting educational reforms and developments
3. Developing life and professional skills
4. Strengthening professional commitment and motivation
5. Improving the quality of learning and educational management

2. Methodological framework

The study adopts a quantitative, descriptive and correlational design with an analytical dimension, the aim of which is to characterise the structure and pedagogical practices, and then to measure the strength and direction of the relationships between the characteristics of continuing professional development (quantity, quality and follow-up) and indicators of classroom practice development (application of TaRL principles and explicit teaching). The relationship is also examined after controlling for educational and contextual variables (years of experience, level of academic training, class size, etc.).

2.1. Research limitations

The characteristics of the population and sample of this study are presented by defining the spatial and temporal boundaries of the field interventions and training programmes relevant to the research question.

1. **Spatial limitations:** The spatial boundaries comprise educational institutions under the regional directorates of Taza, Moulay Yacoub, Taounate and El Hajeb, which fall under the Regional Academy of Education and Training of Fez-Meknes; Table 1 sets out the general data on the composition of the four directorates during the years of participation in the pilot project.

Table 1: Data on the geographical scope of the research.

Regional Directorate	Training Year	Number of training participants		Number of trainers	Number of training days	Number of courses		Institutions involved in the training
		Male	Female			TaRL approach	Explicit teaching	
Taza	2023/2024	61	95	2	11	8	3	8
	2025/2024	294	374	8	11	8	3	40
Towns	2023/2022	133	100	6	11	8	3	11
	2023/2024	402	448	12	11	8	3	55
	2025/2024	192	180	10	4	8	3	44
Moulay Yacoub	2023/2022	32	15	1	11	8	3	2
	2023/2024	150	141	4	11	9	3	19
	2025/2024	202	113	6	11	9	3	21
Eyebrow	2023/2022	69	38	3	8	2	1	4
	2023/2024	189	170	8	8	2	1	19

	2025/2024	163	137	8	8	2	1	19
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A preliminary analysis of the data revealed that the regional directorates' involvement in the **Pioneer Schools** project took place gradually following the first pilot phase, with the results highlighting an increase in levels of participation and engagement, both at the level of educational institutions and among supervisory staff, reflecting a growing momentum in support of this project from its launch through to the end of the **2024–2025** academic year.

Based on the quantitative and qualitative data specific to the research population, **a specific sample** was selected comprising three primary schools from each of the regional directorates of **Taza, Moulay Yacoub** and Taounate, as well as **one school** from the regional directorate of El Hajeb; all of these schools are actively involved in the **Pioneer Schools** Project. **Table 2** below lists the names of these schools and the years in which they joined the project.

Table 2: Data on the schools covered by the study.

Regional Directorate	Educational institutions	Year of participation in the Entrepreneurship Project
Taza	Ibn Tufail Primary School	2024/2023
	Al-Lemon Primary School	2025/2024
	Al-Masbah Primary School	2025/2024
Taounate	Al-Wahda Primary School Group	2023/2022
	Bab Karawa Primary School Group	2024/2023
	M.M. Abdelrahim Bouabid Primary School	2025/2024

2. Time frame:

The time frame of this research is divided into two main sections:

- **Section One:** This involves conducting a comprehensive statistical study of the conditions of continuing professional development over the three years during which the sample institutions participated in the ‘Pioneering Institutions’ project, , covering the academic years **2022–2023, 2023–2024** and 2024–2025, during which various data relating to the actual implementation of the training programmes and their impact on the pedagogical practices of educational staff were analysed.
- **Section Two:** This involves organising a **series of on-site training sessions** with a sample of educational staff from the institutions involved in the research across the various regional directorates, with the aim of **diversifying data collection methods** by adopting a participatory approach combining **questionnaires, interviews and round-table discussions**, in order to overcome the limitations of quantitative data and deepen the qualitative understanding of the phenomenon under study. This process began in **June 2025** and resumed **in September of the same year**.

Table 3 presents the detailed schedule of field visits to the research institutions concerned.

Table 3: Timetable for field visits to the institutions involved in the research.

Educational Institutions	Regional Directorate	Dates of training sessions
Ibn Tufail Primary School	Taza	25 June 2025
Al-Lemon Primary School		26 June 2025
Al-Masbah Primary School		30 June 2025
Al-Wahda Primary School Group	Taounate	12 June 2025

Bab Karawa Primary School Group	Moulay Yaqoub	5 September 2025
M. M. Abdul Rahim Bouabid Primary School		
Al-Mahatta Primary School		
Oulad Yachou Primary School	Al-Hajib	10 September 2025
Bilal ibn Rabah Primary School		
Al-Anba'a Primary School		

2.2. Search criteria

Table 4: Data on the research population.

Regional Directorate	Educational Institutions	Number of beneficiaries of the training		Total	
		Male	Female		
Taza	2023/2024	61	95	156	824
	2025/2024	294	374	668	
Towns	2023/2022	133	100	233	1,455
	2023/2024	402	448	850	
	2025/2024	192	180	372	
Moulay Yacoub	2023/2022	32	15	47	653
	2023/2024	150	141	291	
	2025/2024	202	113	315	

Al-Hajib	2023/2022	69	38	107	766
	2023/2024	189	170	359	
	2025/2024	163	137	300	
Grand total				3,698	

2.3. Research sample

Based on a set of quantitative and qualitative data relating to the research population, this study was limited to three primary schools from each of the directorates of Taza, Moulay Yacoub and Taounate, as well as one school in the El Hajeb directorate, all of which are involved in the Pioneering Schools Project. A range of factors were taken into account, including:

- The diversity of educational institutions in terms of geographical location (urban, semi-rural and rural).
- Inclusion of both genders to ensure balanced representation.
- Taking into account the representation of teaching staff according to their length of service, whether senior or junior.
- Ensuring that all teachers concerned benefited from the training programmes organised by the Directorate, in addition to the meetings organised by the support team.

The sample under study comprises 200 educational staff members, and Table 15 below presents the key data relating to this sample.

Table 5: Data relating to the research sample.

Regional Directorate	Training year	Number of training participants		Total	
		Male	Female		
Taza	Ibn Tufail Primary School	10	9	19	59
	Al-Lemon Primary School	10	9	19	
	Al-Masbah Primary School	14	7	21	
Taounate	MM Al-Wahda Primary School	13	9	22	63
	MM Bab Karawa Primary School	16	3	19	
	MM Abdel Rahim Bouabid Primary School	18	4	22	
Moulay Yacoub	Al-Mahatta Primary School	13	6	19	59
	Yashu Boys' Primary School	12	8	20	
	Bilal ibn Rabah Primary School	11	9	20	
Al-Hajib	Al-Anba'ath Primary School	13	6	19	19
Grand total				200	

2.4. Research methodology and tools

The methodology of this research was based on a descriptive-analytical approach, which aims to collect and analyse beneficiaries’ views on the continuing professional development they received as part of the ‘Leading Institutions’ project. Various tools were employed to achieve this objective, as follows:

Online questionnaire: The questionnaire was designed using Google Forms, as this platform allows for the immediate and rapid collection of responses. It contained closed-ended questions, where respondents could select the appropriate answer from the options provided, as well as open-ended questions that gave participants the freedom to express their views in detail.

Focus group sessions: A series of sessions was organised with the research sample to accurately assess the situation, explain the research objectives, and emphasise the confidentiality agreement governing data collection and analysis.

Distribution of the questionnaire and response rate: After creating instant groups on the WhatsApp application, the questionnaire was distributed to all 200 educational staff who had benefited from the training sessions. A total of 200 questionnaires were returned, representing a 100 per cent response rate, which is a clear indication of the importance of the topic to the participants and their willingness to express their views.

Data collection procedures: The questionnaires were completed concurrently with the communication sessions, whilst ensuring that responses remained anonymous, in order to take time constraints into account and ensure the effectiveness of data collection.

3. Study and analysis of questionnaire data

Question 1: Gender

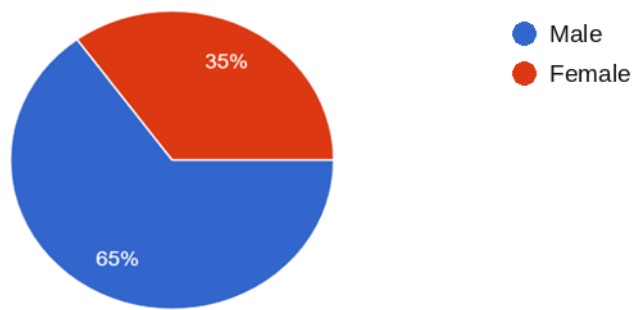


Table 6, Figure 1: Distribution of the research sample by gender.

Gender	Number	Percentage
Female	70	35%
Male	130	65%
Total	200	100%

The statistical results indicate that gender representation within the research sample is uneven, with males constituting the majority at 65 per cent, equivalent to 130 educational staff, whilst females accounted for 35 per cent, equivalent to 70 educational staff. This disparity can be explained by several possible factors, including the professional composition of the institutions concerned or the nature of the participants’ specialisms, which may influence the qualitative distribution of the educational variables under study. This disparity also warrants attention when analysing the results, as it may be reflected in the research findings relating to pedagogical practices and participants’ perceptions; consequently, it is essential to take this imbalance into account when interpreting the data and generalising the findings.

Question 2: The Framework

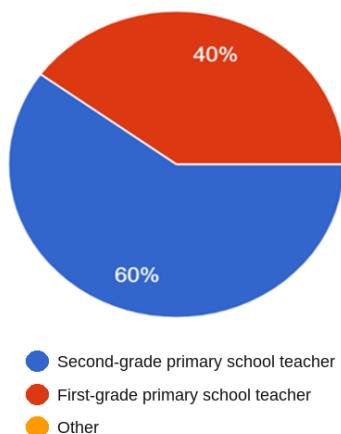


Table 7, Figure 2: Distribution of the research sample by category.

Framework	Number	Percentage
Second-grade primary school teacher	120	60%
First-grade primary school teacher	80	40

The statistical data extracted from the table and chart indicate that the majority of teachers who completed the questionnaire belong to the second-grade primary school teacher category, accounting for 60 per cent, compared with only 40 per cent belonging to the first grade. This distribution reflects the disparity in the representation of teachers by grade within the sample under study, which may indicate that the majority of study participants have relatively less practical experience compared to first-grade teachers; this could influence the study's findings regarding pedagogical practices, given the difference in qualifications and experience between the two grades. This disparity also highlights the importance of taking the hierarchical distribution of teachers into account when analysing the impact of continuing professional development, as its implications may vary according to grade level and professional experience.

Question 3: Overall seniority in teaching

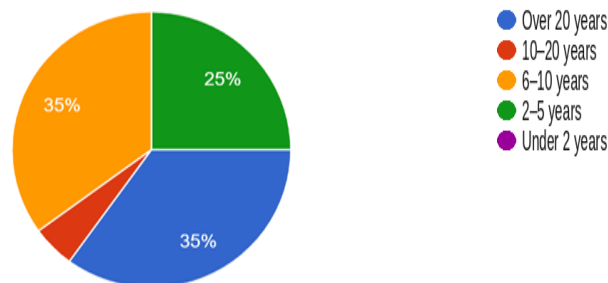


Table 8, Figure 3: Distribution of the research sample by length of teaching experience.

Seniority in teaching	Number	Percentage
Over 20 years	70	35%
Between 10 and 20 years	10	5
Between 6 and 10 years	70	35%
Between 2 and 5 years	50	25
Less than two years	0	0

Analysis of the table and chart above shows that the majority of educational staff who completed the questionnaire have medium to long experience in teaching, reflecting a high level of professional maturity within the sample. The results showed that 35 per cent of teachers have over 20 years' experience, indicating the presence of a large group of seasoned professionals capable of passing on the experience and expertise they have acquired over the years. At the same time, the same proportion (35 per cent) was recorded among teachers with between 6 and 10 years' experience, reflecting a relative balance between long and medium-term experience. As for lecturers with limited experience of between two and five years, they accounted for 25 per cent of the sample, highlighting the presence of those new to the profession, albeit in smaller numbers. It is also noteworthy that the proportion of teachers with between 10 and 20 years' experience does not exceed 5 per cent, whilst no cases were recorded in the category of beginners with less than two years' experience, reflecting a complete absence of new recruits from the sample;

this may indicate the possible influence of sample selection factors or the professional distribution of staff within the institutions concerned.

Question 4: Subject taught

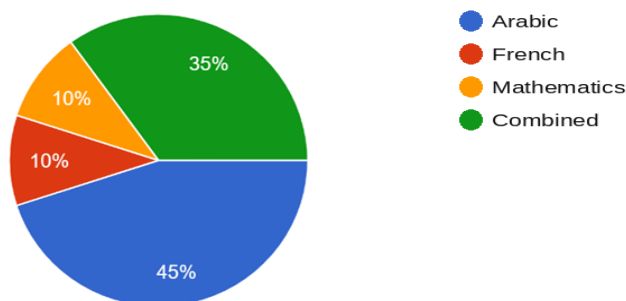


Table 9, Figure 4: Distribution of the sample by subject taught.

Subject	Number	Percentage
Arabic	90	45 per cent
French	20	10%
Mathematics	20	10%
Combined	70	35%

The data extracted from the questionnaire indicate that the majority of participants teach Arabic, accounting for around 45 per cent of the sample, which reflects the centrality of this subject in teaching practice at the target institutions. Conversely, 35 per cent of participants indicated that they teach dual subjects, reflecting the multidisciplinary nature of educational staff and their ability to adapt to the needs of a varied curriculum. As for the teaching of French and mathematics, the proportions are equal at 10 per cent for each subject, highlighting the lower representation of these subjects compared to languages and combined subjects, which may indicate challenges relating to the distribution of teaching staff or pedagogical priorities within educational institutions.

Question 5: The pilot school experience

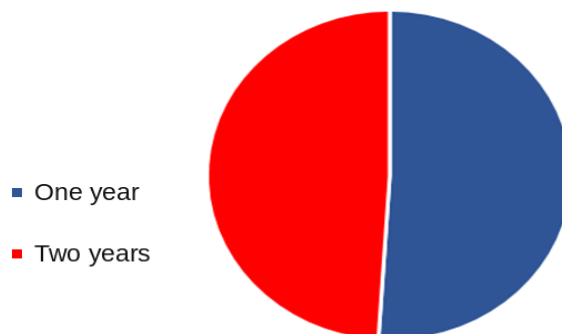


Table 10, Figure 5: The pilot school.

Experiment	Number	Percentage
One year	102	50%
Two years	98	50%

The results of the analysis of the length of experience among the sample indicate a clear balance amongst the respondents in terms of experience at the leading institution. It is evident that half of the participants (50 per cent) have up to two years' practical experience, whilst the other half (50 per cent) have less experience, amounting to just one year. This balanced distribution reflects an equal representation in terms of the accumulation of practical experience within the organisation, which allows for a study of the impact of continuous professional development on pedagogical practices without any clear bias in favour of the group with longer or shorter experience. It also facilitates the comparison of results between the two groups and the analysis of differences related to length of service.

Question 6: Have you ever benefited from training as part of the 'Leading Institution' project?

Table 11, Item 6: Participation in training within the 'Leading Institution'.

	Number	Percentage
Yes	200	100 per cent
No	0	0%

“An analysis of the table and chart above shows that all educational staff working in pioneering institutions who took part in the survey have undergone training within the context of this new reform project, indicating the comprehensive coverage of the training programme and the response of the institutions concerned to the requirements of the reform. This reflects the commitment of educational staff to developing their professional skills and enables a reliable assessment of the impact of this training on their pedagogical practices, thereby enhancing understanding of the relationship between continuing professional development and improving the quality of the educational process.”

Question 7: If the answer is ‘yes’, how many days of training were there?

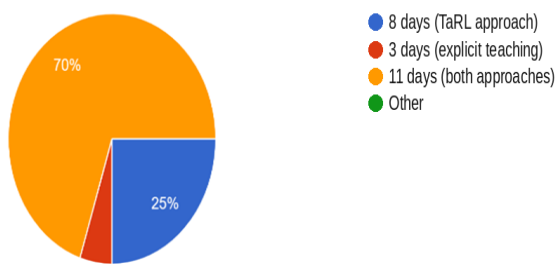


Table 12, Item 7: Number of days of training attended.

	Number	Percentage
8 days (in the TaRL approach)	50	25
3 days of explicit teaching	10	5
11 days (across both approaches)	140	70

The data indicate significant variation in the type and duration of training received by the participants in this project. The vast majority – around 70 per cent of participants – received dual training covering both **the level-appropriate teaching approach** and **the explicit teaching approach** over a period of 11 days, indicating a comprehensive effort to equip this group with the knowledge and skills related to both approaches in an integrated manner.

In contrast, 25 per cent of the sample received training limited solely to **the level-appropriate teaching approach**, and the duration of their training did not exceed 8 days, reflecting a

one-sided focus on this approach without utilising the benefits of explicit teaching. As for the remaining 5 per cent, they received only limited training in **the explicit teaching approach**, lasting no more than 3 days, which may explain the limited nature of their knowledge and practices in this area compared to their colleagues who benefited from longer and more comprehensive training.

These disparities can be analysed as having a direct impact on **the consistency of skill acquisition** among participants, and may constitute an important factor in explaining potential differences in the practical application of pedagogical practices among different groups of teachers. This distribution also points to the need to review the training allocation strategy to ensure balanced and comprehensive benefits for all participants, thereby enhancing the overall effectiveness of the project.

Question 8: How would you rate the training in terms of duration?

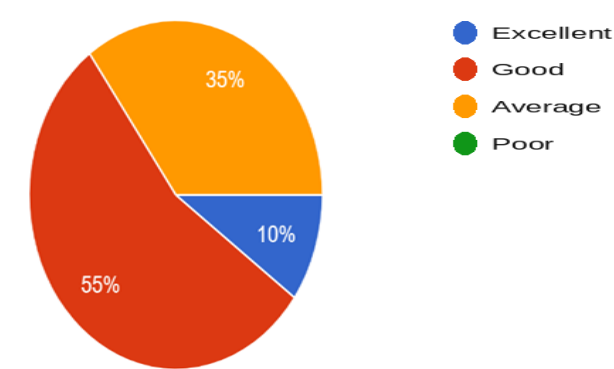


Table 13, Figure 8: Assessment of the time allocated to the training.

	Number	Percentage
Excellent	20	10%
Good	110	55%
Average	70	35%
Poor	0	0%

The above data show that the majority of respondents, 55 per cent, considered the duration of the training to be appropriate, indicating relative satisfaction with the timing of the training

and its suitability to their practical needs. Conversely, 35 per cent of participants considered the duration of the training to be average, which may reflect certain shortcomings or a need for more time to cover the topics in greater depth. A small proportion, 10 per cent, considered the duration of the training to be excellent, indicating their appreciation of the efficient use of time during the training and its alignment with their personal and professional goals. It can be concluded that assessments of the training duration vary, reflecting individual differences in trainees' expectations and the extent to which they benefited from the content provided.

Question 9: How did you find the training conditions?

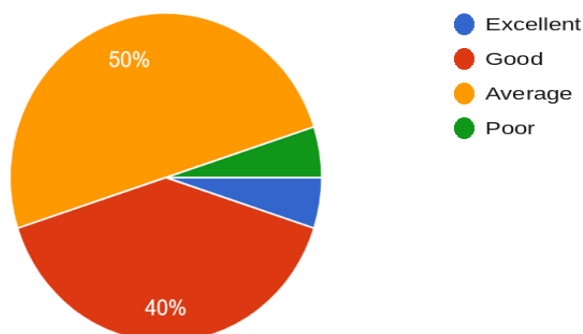


Table 14, Figure 9: Assessment of general formation conditions.

	Number	Percentage
Excellent	10	5%
Good	80	40%
Average	100	50%
Poor	10	5%

The study's findings indicate that participants' assessments of the training conditions vary considerably, with almost half the sample (50 per cent) describing these conditions as average, reflecting a degree of satisfaction without reaching levels of excellence. Conversely, around 40 per cent of participants expressed a positive view, considering the conditions to be good, which indicates a notable appreciation of certain aspects of effective training. On the other hand, the proportion of participants who considered the training conditions **to be excellent** was negligible, at no more than 5 per cent, highlighting that there is considerable scope for improvement

and for raising training standards. Finally, the same proportion of participants (5 per cent) indicated that the conditions were poor, drawing attention to certain critical issues that may affect the overall effectiveness of the training.

Question 10: What is the level of satisfaction with the content provided during the training period?

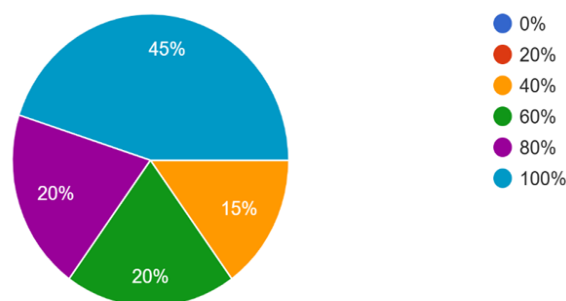


Table 15, Figure 10: Satisfaction with the content provided during the in-service training period.

	Number	Percentage %
0%	0	0%
20%	10	5%
40%	10	5%
60%	70	35%
80%	90	45%
100%	20	10

The findings derived from the above data indicate a clear disparity in the level of teachers' satisfaction with the content provided during the in-service training period. 45 per cent of respondents expressed a high level of satisfaction, averaging around 80 per cent, reflecting a positive assessment of the training content by a large proportion of teachers. Conversely, around 35 per cent of respondents reported an average level of satisfaction of 60 per cent, which may reflect their feeling that the content was partially useful but did not fully meet all their expectations or professional needs. It is also worth noting that 10 per cent of lecturers expressed complete satisfaction with the content, at 100 per cent, which indicates that there were

some cases where the training was found to be comprehensive and fully in line with their expectations. In contrast, only 10 per cent expressed a low level of satisfaction ranging between 20 per cent and 40 per cent, which draws attention to shortcomings or obstacles that may have affected their training experience, whether in terms of the delivery method or the relevance of the content to their practical needs.

Question 11: What is the satisfaction rate with regard to the training facilitators?

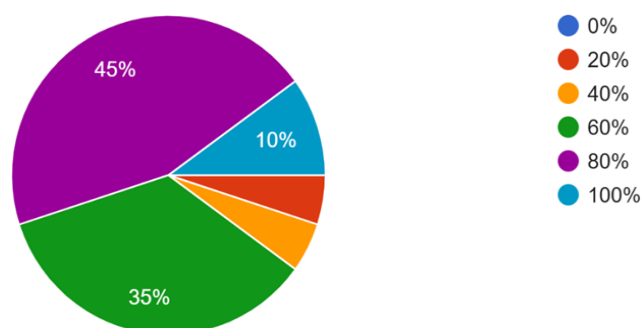


Table 16, Chart 11: Satisfaction rate with training facilitators.

	Number	Percentage %
0%	0	0%
20 per cent	0	0%
40%	30	15%
60%	40	20 per cent
80%	40	20 per cent
100%	90	45

The data presented in the table and chart above indicate that a significant proportion of the sample expressed clear appreciation for the performance of the training facilitators, with 45 per cent reporting complete satisfaction (100 per cent), reflecting a high level of satisfaction with the training provided. On the other hand, 20 per cent of participants reported a high level of satisfaction (80 per cent), which indicates tangible satisfaction, albeit less pronounced than complete satisfaction, whilst 15 per cent expressed moderate

satisfaction, suggesting that some observations or expectations were not fully met. It can be concluded that the majority of learners (65 per cent, comprising those with full and high levels of satisfaction) demonstrate a positive attitude towards the trainers' performance, whilst the remaining proportion calls for consideration of improvements to certain aspects of the training to enhance the learning experience.

Question 12: Were you grouped into teams during this training according to your needs?

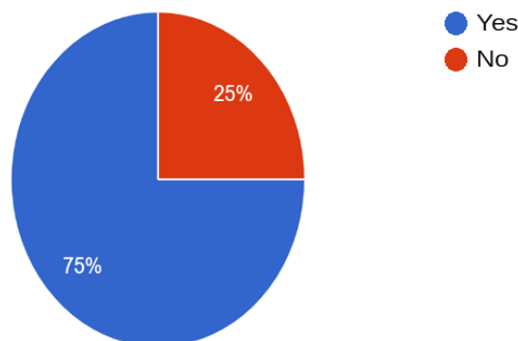


Table 17, Figure 12: Grouping according to needs.

	Number	Percentage
Yes	150	75%
No	50	25%

The results showed that around three-quarters of the study participants (approximately 75 per cent) had undergone group-based training during the training period, reflecting the trainers' reliance on participatory learning methods and group interaction to enhance trainees' skills and enable them to exchange experiences and knowledge. In contrast, around a quarter of participants (25 per cent) indicated that they had not undergone any group work, which may point to inconsistencies in the application of training strategies between the two trainers or differences in the training programmes adopted. This calls for a review of the consistency with which these methods are applied to ensure equal opportunities and maximise the benefits for trainees.

Question 13: To what extent has the training enabled you to develop your knowledge in relation to the Entrepreneurship Institutions project?

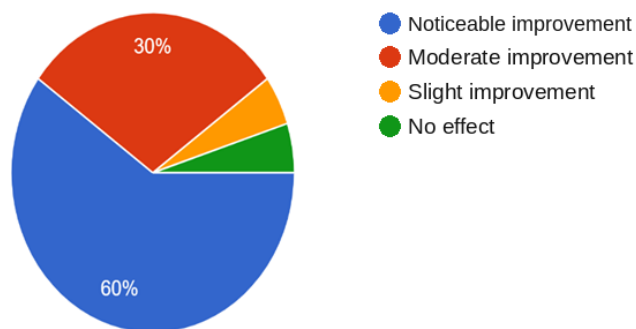


Table 18, Figure 13: The relationship between training and the development of cognitive level within the educational framework.

	Number	Percentage
Significant improvement	120	60%
Average progress	60	30
Poor development	10	5
No effect	10	5

The data above indicate that more than half of the research sample, 60 per cent, observed a clear and tangible improvement in their level of knowledge after benefiting from the training provided under the **‘Leading Institution’** project, which reflects the ability of this training to effectively enhance the knowledge and skills of educational professionals. On the other hand, 30 per cent of participants indicated that the improvement was moderate, which may suggest a limited impact amongst a specific group, possibly due to differences in prior experience or individual learning styles.

Conversely, a small proportion (5 per cent) reported a poor level of development, whilst another 5 per cent stated that they had not observed any significant impact on their knowledge level. This calls for consideration of the factors hindering full benefit from the training, whether in terms of the programme’s content or delivery method, or in terms of working conditions and the ability to apply what has been learnt in practice.

It can be said that these results largely reflect the training’s success in achieving its cognitive objectives, whilst highlighting the need to adapt training strategies to include all participants and to strengthen the integration of theoretical knowledge and practical application within educational institutions.

Question 14: Did the course meet all your learning needs?

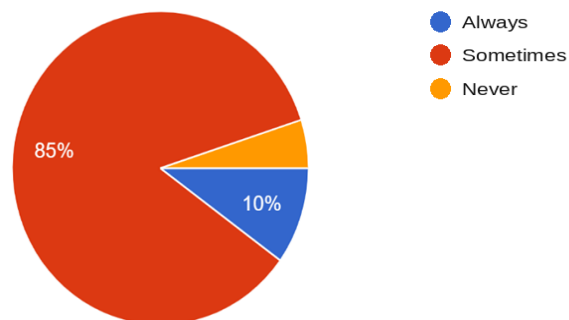


Table 19, Figure 14: The course’s response to learning needs.

	Number	Percentage
Yes	20	10%
No	170	85%
Relatively	10	5%

The results presented in the table and chart above reveal a clear disparity in the respondents’ assessments of the extent to which continuing professional development meets their learning needs. Around 85 per cent of lecturers indicated that the training did not cover all their learning needs, reflecting the majority of participants’ feeling that the training content was inadequate or unsuitable for their specific professional requirements. In contrast, only 10 per cent stated that the training fully met their needs, which may indicate a variation in the participants’ personal experiences or a difference in their expectations of the training. As for the remaining 5 per cent, they reported that the training had only partially met their needs, indicating that there were cases where participants benefited to some extent from the training content but did not achieve all their desired learning objectives. Consequently, it can be concluded that the training programme, despite its importance, needs to be reassessed in terms of its relevance and depth to ensure that it meets as many of the educational staff’s learning needs as possible.

Question 15: Which subject or module did you find most beneficial during the training?

An analysis of the respondents’ answers reveals a general consensus regarding the use of a range of pedagogical approaches, with the results pointing to four main trends: Firstly, **the approach of teaching at the appropriate level** was utilised, reflecting the teachers’ concern to adapt teaching to learners’ varying abilities, which enhances educational effectiveness and ensures progressive learning. Secondly, the use of **core subject approaches** was observed, **such as Arabic, French** and mathematics, indicating that the respondents relied on a variety of teaching tools to strengthen learners’ core skills. Thirdly, some responses indicated the use of **all** teaching approaches, reflecting a holistic view of continuous professional development and a comprehensive understanding of the importance of diversifying educational resources to achieve a tangible impact on classroom practice. Finally, some responses emphasised explicit **teaching**, indicating the teachers’ focus on clarity in lesson delivery and ensuring that learners understand the learning objectives in a direct and structured manner.

Overall, these results suggest that continuing professional development has provided educational staff with a variety of opportunities to make use of multiple teaching tools and approaches, thereby enhancing their planning and teaching abilities and strengthening the quality of pedagogical practice within educational institutions.

Question 16: Which module or resource would you suggest removing from the training programme?

Analysis of the responses showed that the majority of research participants (95 per cent) emphasised the importance of retaining all the modules included in the training programme, considering that each module contributes effectively to achieving the training objectives and developing the participants’ competencies. This high level of consensus indicates that participants clearly recognise the importance of the training’s comprehensiveness and integration, with each module being viewed as an indispensable element in building expertise and knowledge.

Conversely, a small proportion — just 5 per cent — suggested removing the modules ‘Best Practices’ and ‘Routine Activities’, which may reflect a limited perspective that these two modules might be less impactful or less reproducible within the programme. This slight discrepancy opens the door to discussing the possibility of reviewing the way these two components are delivered or adapting their content to better

align with beneficiaries’ expectations, without compromising the comprehensiveness of the training.

Question 17: How would you rate the digital, didactic and pedagogical resources used during the training period?

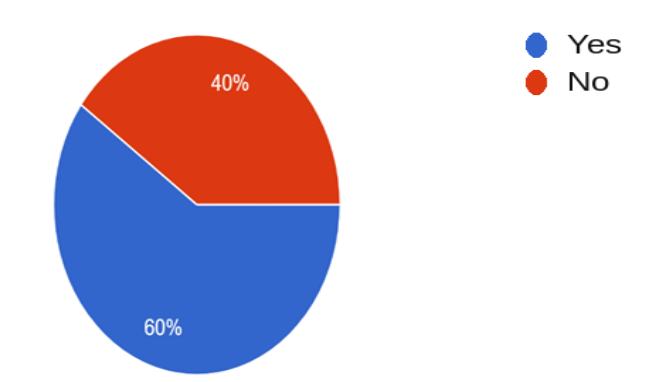


Table 20, Figure 15: Teachers’ assessment of the resources used during the training.

	Number	Percentage
Excellent	0	0%
Good	110	55%
Average	80	40%
Poor	10	5

Both the table and the chart show that the majority of the sample, i.e. more than 55 per cent, rate the resources used during the training — whether digital, didactic or pedagogical — as good, reflecting their overall satisfaction with the quality of these resources and their ability to support their learning and educational practices. On the other hand, around 40 per cent of respondents consider these resources to be of average quality, suggesting there is scope for improvement in certain areas, such as interactivity, the variety of materials, or their suitability to learners’ needs. Only 5 per cent of the sample rated the resources as poor; whilst this represents a relatively small proportion, it highlights the need to take individual differences and the needs of this small group of beneficiaries into account to ensure the inclusivity and effectiveness of the training.

Question 18: Have you been provided with any new resources?

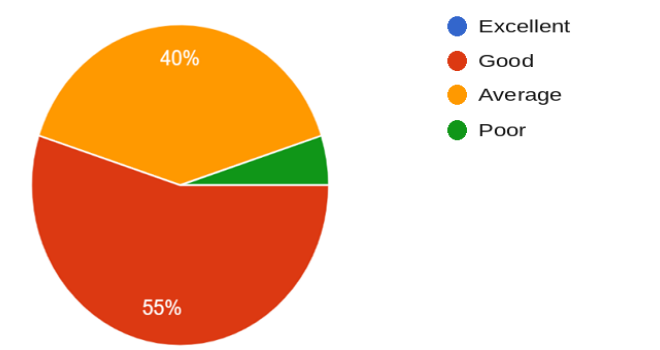


Table 21, Figure 16: Provision of new resources to educational staff.

	Number	Percentage
Yes	120	60%
No	80	40%

The above data indicate that the majority of the sample, 60 per cent, confirm that they have received new resources, reflecting a tangible positive impact in terms of providing them with tools or information to support their work or learning. Conversely, 40 per cent of respondents indicate that they have not received any new resources, highlighting a gap or challenges in the distribution of resources or in access to them. These results illustrate a disparity in individuals’ experiences of the support provided, which calls for an examination of the reasons why some members of the sample were not provided with resources, whether in terms of organisational procedures, logistical constraints or differing individual needs.

Question 19: Were the resources used sufficient to help you develop your skills?

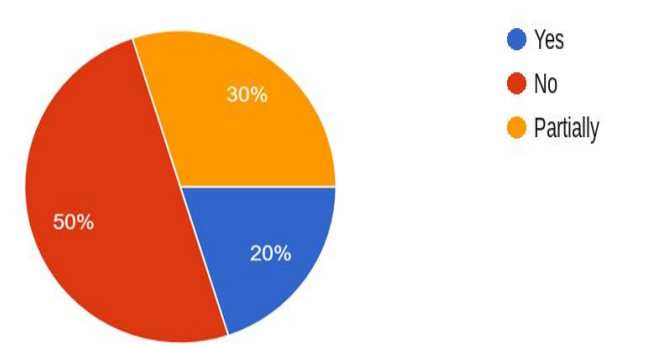


Table 22, Figure 17: Resources used and their relationship to the development of educational staff.

	Number	Percentage
Yes	40	20%
No	100	50%
Relatively	60	30%

The data indicate that half of the sample (50 per cent) consider that the resources used during the experiment were insufficient to develop their skills, which raises questions about the suitability and effectiveness of these resources in supporting learning and self-improvement. On the other hand, 30 per cent of respondents consider these resources to have been relatively useful, as they contributed to a limited extent to their professional development, suggesting a partial impact that can be built upon to improve the resources used or the ways in which they are utilised. As for the remaining 20 per cent, they acknowledged that the resources were sufficient and effective in developing their skills, reflecting a situation of limited effectiveness on the part of the resources, as they did not yield consistent results across all members of the sample. This distribution highlights the need for a thorough evaluation of educational resources and their adaptation to learners’ needs to ensure the desired impact on academic and skills development is achieved.

Question 20: Are you satisfied with the way resources (digital, didactic and pedagogical) are managed within the Leadership Institutions project?

Table 23, Chart 18: Satisfaction with the management of resources.

	Number	Percentage
Yes	120	60%
No	80	40%

The data extracted from the table and chart indicate that the majority of the teachers surveyed, 60 per cent, expressed satisfaction with the management of digital, didactic and pedagogical resources, reflecting a positive assessment of the

level of organisation and utilisation of these resources in the educational process. Conversely, 40 per cent of teachers expressed dissatisfaction, indicating that there are challenges or weaknesses in the management of these resources that require further study and attention. These results suggest that there is a disparity in satisfaction levels amongst teachers, which may be linked to various factors, such as the level of teachers' training, the availability of resources, or methods of use within the educational setting. This calls for research into the underlying causes of dissatisfaction to ensure the effective use of resources in the teaching context.

Question 21: Would you suggest adding other resources (digital, didactic and pedagogical)?

This question yielded a number of suggestions, as follows:

- 1) Adding electronic whiteboards;
- 2) Providing a printer and internet access;
- 3) Relying solely on interactive whiteboards is preferable to overhead projectors;
- 4) Working to improve digital resources by ensuring they are free from superfluous content;
- 5) The presence of an IT specialist to assist teachers in making the best and most effective use of computers...

Question 22: Was the motivation of the training participants taken into account during the training days?

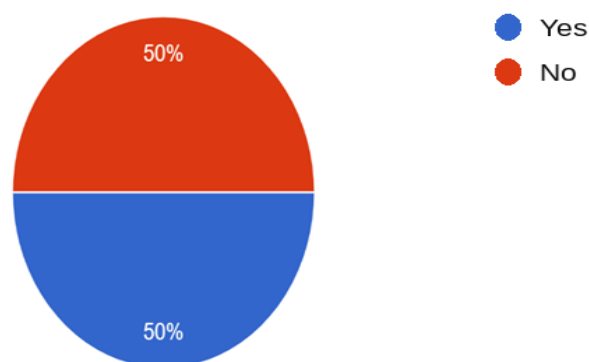


Table 24, Item 19: Incentives for training participants.

	Number	Percentage
Yes	100	50%

No	100	50%
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It is clear from the table and chart above that there is an equal split within the sample regarding the consideration given to teachers' motivation during training days; 50 per cent of respondents confirmed that the training programmes took into account the motivation and encouragement of teachers, whilst the other half expressed the opposite view, indicating a disparity in the individual experiences of the participants. This division may reflect a difference in teachers' expectations or in the methods of delivering the training, and calls for consideration of the factors influencing motivation to ensure that the training objective is achieved consistently and effectively.

Question 23: How did the conditions of the continuing professional development programme affect your state of mind during the programme?

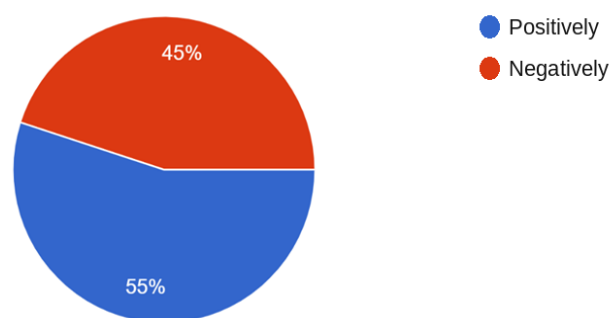


Table 25, Figure 20: The impact of training conditions on teachers' psychological well-being.

	Number	Percentage %
Positively	110	55%
Negative	90	45%

The study's findings showed that 55 per cent of participants felt that the training conditions had a positive impact on their mental well-being, reflecting the role of a supportive training environment in fostering a sense of comfort and motivation amongst trainees. Conversely, 45 per cent of respondents indicated that these conditions had a negative impact on their mental well-being, which may reflect certain critical issues relating to work pressure or difficulties in adapting to the training requirements. This varied distribution reflects the

diversity of individual experiences in dealing with the training environment and highlights the need to take psychological factors into account when designing training programmes to ensure the target group derives maximum benefit.

Question 24: How did the timing of the training programme affect your mental well-being?

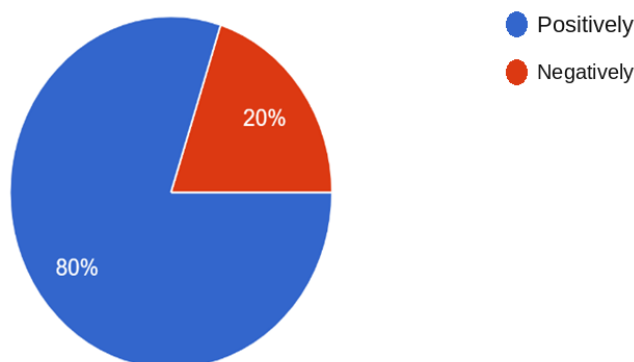


Table 26, Figure 21: Timetable organisation and its impact on the teacher's psychological well-being.

	Number	Percentage
Positive	160	80%
Negative	40	20%

The data in the table and chart indicate that the majority of teachers, 80 per cent, believe that the timing of the training programme had a significant positive impact on their mental well-being, reflecting that the allocation of time and the consideration given to periods set aside for training activities contribute to enhancing trainees' satisfaction and psychological motivation. Conversely, 20 per cent of teachers reported feeling that the timetable had a negative impact on their mental well-being, which may indicate some shortcomings in the allocation of time or in the alignment of timings with their individual needs. This calls for a careful review of the methods used to plan the training schedule to ensure the maximum psychological and professional benefit for all trainees.

Question 25: What suggestions do you have for improving and enhancing the psychological aspect during future training courses?

Through this question, a set of proposals aimed at enhancing the psychological well-being and motivation of participants in

future training programmes was gathered. These can be summarised and analysed as follows:

1. **Implementing travel and training allowances:** This is considered one of the key elements for strengthening psychological commitment and motivating trainers to participate actively in the training.
2. **Selecting suitable and nearby training venues:** Reducing travel distances and facilitating access to training centres helps to minimise psychological stress and increase concentration during learning.
3. **Organisation and scheduling that take learners into account:** Adopting flexible and balanced timetables, with specific topics and clear objectives, helps to foster psychological adaptation and a deep understanding of the content.
4. **Adopting an interactive and practical approach:** Moving away from rote learning and focusing on practical activities encourages active participation and supports active learning and the teacher's working memory, which in turn has a positive impact on the development of their teaching practice.
5. **Providing a psychologically and physically comfortable space:** A comfortable training environment helps to reduce stress and stimulate creativity and positive interaction amongst participants.
6. **Equipping and improving training centre facilities:** Equipping classrooms with the necessary equipment and tools raises the standard of training and increases teachers' sense of the seriousness and respect accorded to their efforts.
7. **Respecting individual differences:** Taking into account the varying levels of expertise and experience amongst teachers ensures more appropriate training and encourages learning tailored to individual needs.
8. **Providing a financial allowance in lieu of meals:** Consider the possibility of removing meals to avoid distractions, and replacing them with a financial allowance, which increases motivation.
9. **Allocating sufficient time for training:** Providing an appropriate timeframe allows teachers to master

pedagogical approaches and apply them effectively in the school setting, free from haste and pressure.

10. **Allowing teachers scope for discretion:** Giving teachers the freedom to draw on their personal experience and devise innovative teaching solutions, rather than requiring strict adherence to instructions, fosters a sense of responsibility and autonomy.

Recommendations and suggestions

Firstly: Recommendations

1. **Promoting continuity in continuing professional development programmes:** The research findings recommend that continuing professional development programmes be organised periodically and regularly, taking into account a flexible timetable that accommodates the commitments of educational staff, with the aim of consolidating professional skills and translating them into effective classroom practices.
2. **Aligning training content with the actual needs of teaching staff:** Training programmes should be developed based on an accurate assessment of teachers' professional needs, with a focus on developing teaching skills to the required standard and adopting explicit teaching methods, to ensure a tangible impact on pedagogical practice.
3. **Using continuing professional development as a tool for self-directed professional development:** It is recommended that teaching staff be encouraged to view continuing professional development as a means of enhancing their own competencies in planning, implementation and assessment, whilst providing institutional support for the application of the teaching strategies acquired in the classroom.
4. **Providing mechanisms for ongoing assessment and monitoring:** A periodic assessment system should be adopted to measure the impact of continuing professional development on pedagogical practices, including direct classroom observations, feedback questionnaires and analysis of teaching performance, with the aim of identifying strengths and weaknesses and guiding the development of future programmes.
5. **Encouraging interaction and the exchange of experiences amongst educational staff:** It is recommended to foster a culture of collaborative

learning and participation amongst teachers, through discussion groups, workshops and digital platforms, to exchange best practices and effective teaching methods in line with the required standards and explicit instruction.

Secondly: Suggestions for future research

1. **Expanding the sample scope:** It is suggested that future studies include a more diverse range of educational institutions, including lower secondary schools, to examine the impact of continuing professional development in different contexts and to compare results across different educational environments.
2. **Adopting multiple assessment tools:** It is recommended to use a variety of assessment tools, including direct classroom observations, individual interviews, questionnaires and qualitative analysis of teaching activities, to obtain a more comprehensive picture of the impact of continuing professional development on pedagogical practices.
3. **Examining the relationship between continuing professional development and educational innovation:** It is suggested that research be conducted into the extent to which continuing professional development contributes to the development of innovative teaching methods and improves the ability to address individual differences amongst learners.
4. **Analysis of factors influencing the effectiveness of continuing professional development:** Future studies could focus on identifying the factors influencing the success of CPD programmes, such as the intrinsic motivation of educational professionals, institutional support and the availability of educational resources, in order to provide more precise recommendations for programme development.
5. **Linking continuing professional development to educational reform policies:** It is recommended that continuing professional development programmes be aligned with developments in national education policies, particularly with regard to teaching to the required standard and explicit instruction, to ensure that classroom practice is consistent with the objectives of educational reform.

Conclusion

This study of the impact of continuing professional development on the development of pedagogical practices among educational staff in leading institutions confirms that such development has become a vital tool for keeping pace with the rapid educational reforms in Morocco, particularly in light of the Ministry's strategy aimed at improving the quality of education and achieving learning equity for all learners, as set out in Framework Law 51.17 and the plans associated with the national education and training projects.

In this context, continuing professional development is viewed not only as a means of acquiring theoretical knowledge, but also as a mechanism for renewing classroom practice in line with the requirements of level-appropriate teaching and explicit instruction. The research findings showed that teachers who benefited from training programmes tailored to their professional needs and linked to the latest pedagogical and technological developments became better able to diversify their teaching methods, promote active learning, and take into account individual differences amongst learners, which enhances the quality of learning and contributes to achieving the objectives of educational reform in Morocco.

The research also highlights that measuring the impact of continuing professional development is a fundamental mechanism for evaluation and continuous improvement, as it enables management and educational institutions to determine the effectiveness of training programmes, assess the extent to which theoretical knowledge is transferred into actual practice, and derive the necessary recommendations for the development of training policies. Consequently, continuing professional development becomes a strategic tool not only for developing professional competencies, but also for ensuring that structural and educational reforms are aligned with the reality of school life, and for strengthening the institutional capacity for innovation in pedagogical practices.

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