Article

Pedagogical Training of Primary School Teachers in Light of Gender and Specialization Variables

(A Field Study on a Sample of Teachers from Some Schools in Relizane)

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Abstract

The current study addresses an important theoretical and applied pedagogical issue that has attracted the attention of many specialists in the field of education. This study concerns the pedagogical training of primary school teachers of various types, based on gender and specialization. The aim of this study is to explore the relationship between the pedagogical training variable and the performance of primary school teachers. It also seeks to determine whether there are statistically significant differences in the impact of pedagogical training on teacher performance based on the variables of gender and specialization.

Keywords: Pedagogical formation, Primary school teachers.

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Introduction

The pedagogical formation of teachers is considered one of the most important educational topics that captured the interest of researchers and practitioners in the educational field. This was a result of the pedagogical formation's impact on teachers' performance during their teaching activities, which directly reflects on the academic achievement of pupils at all educational stages. In addition to the knowledge formation that is required in any domain, teachers are in dire need of a precise pedagogical methodology that allow them to present their knowledge in a smooth and comprehensible manner, enabling the positive impacts of the curriculum to reflect on the pupils' behaviors. If teachers lack pedagogical fundamentals, they won't be able to deliver their educational message effectively, which doesn't allow the positive impacts to manifest. Therefore, pedagogical competencies are necessary for the success of the teaching-learning process.

Managing the classroom and mastering the methods of classroom interaction and teaching techniques, and their application in the appropriate teaching-learning situation can only be achieved through specialized pedagogical formation. This formation improves the pedagogical competence of teachers, being the cornerstone of any educational act. Because engaging in various activities within the framework of the classroom leaves an impact on the behaviors of pupils, mastering different practical procedures that both the learning and teaching acts require makes a teacher successful and effective, transferring this positivity to the pupils and vice versa. Teachers cannot achieve this success except through taking part in pedagogical formation of different types, whether preparatory or continuous during service, without underestimating the importance of other aspects related to the knowledge formation of teachers, as well as their psychological and social characteristics, and their relationship with the academic achievement of pupils.

1. Problem Statement:

Primary school education is considered the fundamental basis upon which the upcoming educational stages are built in different educational systems globally, regardless of their philosophical approach. As a matter of fact, the knowledge acquisitions of primary school serve as an educational foundation that the knowledge acquired in subsequent educational stages is built upon. If the initial foundation of knowledge is solid, acquiring new knowledge will be smooth in subsequent stages. However, if this foundation is fragile and not well established, subsequent knowledge acquisitions will be difficult for pupils. In order to get the pupils to build a solid knowledge and educational foundation in primary school, teachers must master the methods of



passing down the knowledge related to the curriculum in a pedagogical and systematic way. This is only achieved through the teachers' obtainment of appropriate pedagogical formation or knowledge, allowing them to transfer their theoretical and applied knowledge to pupils using suitable methods and techniques. This demonstrates the importance of pedagogical formation for teachers in all educational stages, particularly in primary school.

Based on the aforementioned, we can pose the following questions:

- Is there a relationship between pedagogical formation and the performance of primary school teachers?
- Are there statistically significant differences attributed to the variable of gender in terms of the impact of pedagogical formation on teacher performance?
- Are there statistically significant differences attributed to the variable of the subject taught in terms of the impact of pedagogical formation on teacher performance?

Hypotheses:

- There is a relationship between pedagogical formation and the performance of primary school teachers.
- There are statistically significant differences attributed to the variable of gender in terms of the impact of pedagogical formation on teacher performance.
- There are statistically significant differences attributed to the variable of the subject taught in terms of the impact of pedagogical formation on teacher performance.
 - 2. Reasons for Choosing the Topic:
 - Personal interests and the scientific and pedagogical formation related to the topic.
 - The importance of the study from both theoretical and practical perspectives.
 - Enriching the scientific educational knowledge.
 - 3. Study Significance:
- This study clarifies the impact pedagogical formation has on the teaching competencies of primary school teachers and how it helps them perform their fundamental duties.



- This study attempts to provide theoretical and practical information about pedagogical formation.
 - In contributes to the development of necessary skills for primary school teachers.
 - 4. Study Objectives:
- Finding out how pedagogical formation contributes to the development of teaching competencies for primary school teachers.
- Finding out whether or not there are differences attributed to the variables of gender and subject in terms of the impact of pedagogical formation on teaching competencies for primary school teachers.
 - 5. Operational Definition of Study Variables:
 - Pedagogical Formation:

It is a formation that primary school teachers receive in the pedagogical domain.

• Primary School Teachers:

They are the teachers who work in primary schools and undergo pedagogical formation of different types.

6. Study Limitations:

This study was limited to a sample of primary school teachers, totaling 108 teachers, distributed between 18 male teachers and 90 female teachers, working in some primary schools in the Wilaya (province) of Relizane.

7. Characteristics of the Primary Sample:

Table (01) illustrates the distribution of the sample individuals based on gender:

Gender	Frequencies	Percentage
Males	18	16.67%
Females	90	83.33%



Total	108	100 %

The table above shows that the female percentage was estimated at 83.33%, which is higher compared to the male percentage, which was 16%.

Table (02) illustrates the distribution of the sample individuals based on the taught subject:

Subject	Frequencies	Percentage
Arabic	102	94.44%
French	60	5.56%
	108	100%

Table (02) shows that the Arabic language percentage was estimated at 94.44%, which is higher compared to the French language percentage, which was 5.56%.

- 8. The Theoretical Framework:
- 8.1 The Definition of Pedagogical Formation:
- Pedagogical formation is a learning process of a set of practical, organized, and consecutive procedures, represented by behaviors and activities directed towards behavior. (Al Amyan: 2004, p. 148)
- Mialaret defines it as a set of procedures that enable teachers to perform an occupational activity, with the aim of practicing various methods and techniques that allow them to effectively communicate with their classrooms. (Abdellatif: 1994, p. 152)
- Pedagogical formation is also looked at as the process that enables the trained learner, in all scientific and educational specializations to engage in the process of learning and teaching, along with the accompanying guidance and direction in different learning and teaching situations. (Al Harbi: 2008, p. 82)
- Farhati considers pedagogical formation a set of pedagogical and didactic activities aimed at acquiring or developing knowledge to practice a certain profession or work. It also comprises



theoretical knowledge, skills, and situations that enable an individual to perform their job or profession. (Farhati: 2011, p. 35)

8.2 The Characteristics of the Formation Process:

Formation is a continuous fundamental activity, an integrated system, an evolving and renewable, and comprehensive activity.

8.3 Types of Pedagogical Formations:

A- The Initial Pedagogical Formation:

This stage is considered one of the most important stages in training new teachers for many reasons, including: knowledge, approaches, the desired objectives, the nature of the beginner trainees and their assets, as well as their readiness and love for the job and their perceptions on the teaching process in the educational level assigned to them. (Majdi: 2005, p. 23-24)

This training is provided in technological institutes of education, training centers, and universities. It aims at upgrading the level of the employee, raising their awareness, and assisting them in performing their jobs.

The formation of primary school teachers of grade one and two lasts for two years generally, where trainees receive a knowledge-based and occupational formation, the knowledge aspect is focused on in the first year of the formation, while more attention is given to the occupational and practical aspect in the second year, as the trainees take part in a field training. (Bousaada: 2011, p. 297)

The duration of the initial pedagogical formation during the experimental training period for educational staff was set at four (4) weeks, with a total of 140 hours (Mabrouk: 2019, p. 31).

Objectives of the Preparatory Pedagogical Formation:

- Enhance teachers' experiences in the field of education.
- Assist novice teachers in familiarizing themselves with relevant systems, laws, and regulations.
 - Develop the teaching skills and knowledge of trainee teachers.
 - Increase teachers' productivity and help them perform their duties more effectively.
 - Improve interpersonal relationships within the educational environment.



- Master modern educational methods and strategies.
- Prepare teachers to acquire new knowledge (Abdeldjalil: 2018, p. 4).

B- Continuous Formation:

Continuous formation extends from the initial formation and is a necessary and important stage in a teacher's professional development, complementing the first stage. This type of formation continues until the teacher is permanently appointed, which usually lasts for one year but can extend if the teacher fails the performance examination. This type of formation has been in practice since the academic year 1974/1975.

In-Service Formation:

In-service formation is a crucial aspect of contemporary educational systems, driven by modern developments and the nature of contemporary schools. It is an essential factor in the success of the educational process and a means of achieving the teacher's professional and knowledge growth.

Definition of In-Service Formation:

It is defined as the formation that teachers receive from the day they start their careers until they retire, covering their entire active professional lives. This formation is delivered through seminars, workshops, training sessions, and other purposeful scientific activities aimed at updating teachers' knowledge.

Rached defines it as a set of long or short programs and courses, workshops, and other arrangements aimed at granting certificates and qualifications. These aim to provide the necessary cognitive, skill, and emotional experiences required for teachers to enhance their scientific level and improve their theoretical and practical educational performance (Rached: 2002, p. 177).

Characteristics of In-Service Formation:

- Organized effort based on planning.
- Addresses the competencies of human resources within the organization.
- The formation process involves organized and planned education to develop and enhance competencies.



- Scientifically oriented formation focuses on current and future performance and behavior.
- Formation Benefits individuals, small groups, organizations, and society (Abdessamie: 2005: p. 172)

Objectives of In-Service Teacher Formation:

- Deepen trainee teachers' understanding of the nature of the subjects they teach, their content, objectives, and teaching methods. Establish communication channels with educational institutions concerned with training, utilizing their expertise to raise standards.
- Improve teachers' performance and develop their capabilities, leading to job satisfaction, which in turn boosts their morale and psychological well-being.
- Equip trainees with up-to-date scientific and technological information, skills, and educational theories, making them more capable of adapting to changes (Ben Amar: 2009: p. 151).
- Enhance the efficiency of those responsible for educational training through specialized training programs, qualify and train those in the teaching profession according to standards and rules, prepare teachers and administrators to contribute to training programs, and foster a cooperative environment within their institutions.
- Improve teachers' performance in their subjects, develop their teaching skills, increase their capacity for creativity and innovation, and address deficiencies and prevent errors in some of their performances (Bennoura: 2018: p. 26-27).

Importance of In-Service Formation:

According to Abdel Hakim Moussa, the importance of in-service formation is justified by the following points:

- It provides teachers with the opportunity to acquire new knowledge and skills required for the teaching profession.
- It helps teachers change their attitudes and adopt experimental approaches to the profession, enhancing their morale and productivity.
- It fosters continuous learning concepts and self-learning skills among teachers, enabling them to keep up with ongoing changes.



- It facilitates teachers' openness to their colleagues, promoting professional development through opportunities for interaction in group tasks and activities that require collaborative work and embody team spirit.
- It offers teachers new perspectives in their professional practice, helping them understand professional challenges and how to address or mitigate their impact on teaching (Cherif et al.: 1983, p. 11-12).

8.4 Principles and Foundations of Formation:

The principles and foundations of formation include:

- Comprehensiveness: Formation should encompass all dimensions of human development, such as values, attitudes, knowledge, and skills. It should target all functional levels and include all employees.
- Realism: Formation goals should be realistic and not excessively idealistic. They should be based on facts and follow scientific methodology.
- Continuity: Formation strategies should consider continuous change and transformation in all aspects of life, especially in work methods, tools, and related information, making employees more adaptable to these changes.
- Applicability: Formation goals should be practical and translate into actual practices.
 They should not remain theoretical but be implemented in the workplace.
- Formation is a purposeful process: Clear, realistic, and achievable Formation goals should be set, considering the subject, time, place, quantity, cost, and quality (Zerrik: 2018, p. 26).

8.5 Conditions for Pedagogical Formation:

Habib Telouin suggests that there are several relatively agreed-upon conditions concerning the concept of formation, including:

- Aiming to equip the trainee with knowledge: The goal is to provide the trainee with knowledge that enables them to master specific predetermined skills.
- Purpose of the provided knowledge and specialized skills: The knowledge and skills imparted during formation are aimed at preparing the trainee for a profession, job, or craft, or at improving or renewing the way these tasks are performed.



- Formation is defined within a specific timeframe, irrespective of the concept of continuous education, which some may use interchangeably.
- Formation is generally used when referring to an age group that has surpassed school age, extending beyond basic skills such as reading, writing, and arithmetic.

8.6 Aspects of Pedagogical Formation:

There are three main aspects of pedagogical formation:

- Functional aspect: This is the most crucial aspect as it directly relates to the field and is conducted with specific objectives in mind, thus necessitating the fulfillment of these goals.
- Organizational aspect: Formation is a systematic and organized series of processes that allow the trainee to acquire knowledge and skills on one hand, and apply them in practical settings on the other.
- Continuous aspect: Formation is a lifelong human activity, and basic formation is merely one phase among these aspects. It animates the concept and practice of formation. Formation is not an end in itself but a means to achieve a goal, and it is essential to consider all these aspects in their entirety, as each provides meaning and context to the others. Therefore, a comprehensive understanding of the formation phenomenon can only be achieved by considering all these aspects without exception (Abu Abdellah: 2010, p. 11).

8.7 Reasons for Formation:

There are numerous reasons why a trainee might need formation, either in general or specialized fields, including:

- A- Rapid technological changes: The swift pace of technological change contrasted with the very slow evolution of human behaviors.
 - B- Personal desire for formation and knowledge renewal.
- C- The necessity of formation to keep up with developments, remain competitive, and integrate into a complex and changing society.
- D- Reducing failure rates in educational institutions, which makes formation crucial in helping trainees make up for lost time.



- E- Lack of practical methods for guiding individuals and workers, especially when there are organizational issues within the institution.
- F- Low productivity within institutions of various types due to a lack of essential skill mastery.

8.8 Methods of Pedagogical Formation:

To achieve the aforementioned elements (types of formation) and implement formation programs, several methods and approaches should be followed, including:

- A. Lecture method: This is one of the most prominent formation methods, where the lecturer or trainer presents the material included in the formation program to the trainees, using visual aids like maps and films. This method aims to provide trainees with theoretical information and knowledge, which is first ingrained in their minds before practical application.
- B. Practical work method: In this method, the trainee applies what they have learned under the supervision of a trainer, highlighting the trainee's personal effort and comprehension of the theoretical lessons.
- C. Case study method: This involves analyzing actual or hypothetical cases, provided they contain all relevant data and information. The objective of this method is to enhance problem-solving abilities and decision-making skills through organized analysis, considering all aspects of the problem, and developing and selecting the best solutions based on the trainee's information and experience.
- D. Real situation formation method: Trainees assume roles of individuals involved in an event or problem, simulating real-life situations. This method tests the trainees' competencies in performing assigned tasks and their ability to fulfill job roles according to established standards.
- E. Seminars and conferences method: This method includes courses and meetings held as per the suggestions of those overseeing the formation process or based on recommendations from specialists at higher levels. The aim is to discuss significant issues and topics, providing an opportunity for specialists and trainees to clarify unaddressed points and comment on proposed ideas.

The teacher is considered the most crucial element in the educational process, being the primary implementer of curricula that reflect the philosophical and intellectual characteristics of society. The goal is to translate predetermined objectives into behaviors among students. For a



teacher to achieve these goals by developing the student's personality according to societal characteristics and values, they must possess multiple skills and competencies—human, scientific, academic, and pedagogical—acquired through formal formation and influenced by social and professional experiences.

The teacher utilizes their scientific, pedagogical, and psychological formation in their interactions and communication with students in the classroom. This formation influences their educational perception and professional practices within the classroom.

- 9. Applied Framework of the Study:
- 9.1 Research Methodology:

The descriptive method is among the most widely used methodologies in the field of social sciences due to its specific characteristics that align with the nature of social phenomena. The nature of the study determines the type of methodology used, and these factors led us to adopt the descriptive-analytical metho

9.2 Study Instrument:

Psychometric Properties of the Study Instrument:

Validity:

Content Validity: The study instrument was presented to experts from the Department of Psychology and Educational Sciences at the Faculty of Social Sciences, Ahmed Zabana University in Relizane, to obtain their opinions and observations on the degree or level of validity of the statements composing the research tool.

Reliability:

Reliability Calculation: To ensure the reliability of the questionnaire, the researcher calculated its reliability using the split-half method.

Table 3: Shows the reliability of the questionnaire after calculating the correlation coefficient.

Sample	Number of Items	Pearson Correlation	Correction Coefficient
		Coefficient	



30	46	0.855	0.92

<u>Comment:</u> As seen from Table 7, the Pearson correlation coefficient reached 0.855. After correction using the Spearman-Brown formula, the reliability coefficient became 0.92. This indicates that the questionnaire possesses a high degree of reliability.

9.3 Discussion and Analysis of Results:

First Hypothesis:

This hypothesis posits a relationship between pedagogical formation and the teaching efficiency of primary school teachers. The overall average degree for competencies was 20.86, while the standard deviation for all dimensions was 4.507

The results of the teachers' responses to the questionnaire items, which reflected the basic teaching skills in primary education, expressed as the overall average responses of the sample individuals for each dimension individually, are as follows:

Classroom Interaction: The overall arithmetic mean for this dimension was 48.84, with a standard deviation of 0.82, indicating that primary school teachers have a good command of classroom interaction.

Teaching Methods and Techniques: The overall mean for this dimension was 29.22, with a standard deviation of 6.48, which is relatively low. This suggests a deficiency in the use and variety of teaching methods and techniques, corroborated by the study of Abdul Moumni, who found that teaching method competency was less than execution competency.

Teaching Aids: The overall mean for this dimension was lower, at 3.01, with a standard deviation of 0.91.

Despite the importance of teaching aids in facilitating learning and enriching the educational experience, their usage rate remains below the desired level. Statement number 30, which had an arithmetic mean of 2.12, further illustrates this, with most teachers unfamiliar with the criteria for selecting teaching aids. Teachers attributed this to the lack of educational resources in institutions, aligning with Wafaa Latrach's 2019-2020 study, which found that teachers lack proficiency in using various modern teaching technologies.



The overall mean for this dimension was 2.72, with a standard deviation of 0.82, indicating that formation has a minimal impact on improving teachers' efficiency in classroom assessment. This finding is consistent with Wafaa Latrach's study, which concluded that formation only moderately enhances personal assessment practices in primary schools.

Based on the above, it can be concluded that formation has only a minimal impact on teachers' practice of various teaching competencies in primary schools. This is attributed to several factors, most notably the nature of the formation itself and other factors related to the trainee teacher's perspective on formation and its perceived importance.

This confirms a weak relationship between the pedagogical formation of teachers and their performance in various teaching competencies. This conclusion is illustrated by the overall average degree for competencies, which was 20.86 with a standard deviation of 74.50.

Second Hypothesis:

The second hypothesis posits that there are statistically significant differences attributable to the gender variable regarding the impact of pedagogical formation on the teacher's performance. After field study and comparison of the means between the male and female groups, it was found that there were no statistically significant differences between male and female teachers in terms of the impact of pedagogical formation on teacher performance according to the gender variable. The calculated 't' value was 0.695, which is smaller than the tabulated 't' value of 1.65 at a degree of freedom (106) at the significance level (0.05). This result is consistent with the study by Leila Hamdi (2017-2018), which concluded that there are no differences in the attitudes of primary school teachers towards in-service formation according to the gender variable.

Third Hypothesis:

The third hypothesis posits that there are statistically significant differences attributable to the subject variable regarding the impact of pedagogical formation on the teaching competencies of primary school teachers. After comparing the means of the two groups concerning the impact of pedagogical formation on teacher performance according to the subject variable, the calculated't' value was 1.29, which is smaller than the tabulated 't' value of 1.65 at a degree of freedom (106) at the significance level (0.05). This indicates that there are no significant differences between the two groups in terms of the impact of the formation factor on the teacher's professional performance according to the subject taught by the teacher (Arabic, French). This means that the hypothesis suggesting statistically significant differences in the impact of pedagogical formation on teacher



performance attributed to the subject variable is not supported. This result aligns with the study by Boulal El Kader (2018-2019).

Conclusion:

Pedagogical formation, in its various forms, is considered an important factor in positively influencing a teacher's performance in various skills while delivering educational content to students. Pedagogical knowledge is essential for every teacher to achieve the goals set for the educational process, whether it involves classroom communication skills, the use of different types of teaching aids, the application of teaching methods and techniques, or the use of various assessment tools. Theoretically, pedagogical formation should contribute to improving a teacher's performance. However, the current study sought to answer whether pedagogical formation actually enhances a teacher's performance or if there is a relationship between pedagogical formation and a teacher's teaching performance. The study found that the impact of formation on a teacher's teaching practice is minimal. This is attributed to several factors, the most important being the nature of the formation itself and the often negative perception of formation by the trainee teachers. Additionally, this study showed that there are no differences in the impact of the pedagogical formation factor on teacher performance attributable to the gender variable or the subject taught. All these findings are within the limits of the current study.

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