

Enhancing Learning Management in Moroccan Education: Challenges, Opportunities, and Recommendations

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Abstract: The Moroccan education system is undergoing a transformative journey with learning management at its core. This research delves into the intricacies of learning management in Moroccan education, deciphering the challenges, recognizing the opportunities, and proposing actionable recommendations. It navigates the landscape of a diverse nation, marked by regional disparities, linguistic richness, and cultural diversity. The challenges encompass inequities in educational access and limited parental involvement, while opportunities arise from the widespread adoption of educational technology and positive student perceptions. The study concludes with recommendations that advocate for policies reducing regional disparities, fostering parental engagement, promoting linguistic inclusivity, optimizing educational resources, and leveraging technology while upholding teacher professional development. This research contributes to the ongoing quest for quality and equity in Moroccan education.

Keywords: Learning Management, Moroccan Education, Challenges, Opportunities, Recommendations, Educational

Technology, Parental Involvement, Linguistic Diversity, Teacher Professional Development, Educational Equity.

INTRODUCTION

The education system is often seen as the cornerstone of a country's growth and development. In the Moroccan context, education plays a central role in shaping an informed, skilled, and prosperous society. However, achieving these objectives largely hinges on the quality of learning management within educational institutions. Learning management, encompassing the planning, implementation, monitoring, and evaluation of learning processes, is a key element to ensure that learners make the most of their educational experience [1]. Morocco, as a developing nation, faces a number of challenges in its educational system. Despite efforts to enhance the quality of education, persistent issues remain. Dropout rates remain high, disparities in access to education persist, and students' performance in national and international assessments falls short of expectations. To address these issues, it is imperative to closely examine how learning is managed in the Moroccan education system [2].

Morocco has made significant investments in its education system over the decades. Reforms have been implemented to improve access to education, the quality of teaching, and the relevance of the curriculum. However, despite these efforts, gaps persist. Moroccan schools grapple with challenges such

as overcrowded classrooms, inadequate infrastructure, variable teacher quality, and geographical disparities in education access [3].

Furthermore, the Moroccan education system faces cultural, linguistic, and socioeconomic challenges. The country's ethnic and linguistic diversity makes learning management complex, particularly in a context where multiple languages are spoken, including Arabic, Berber, French, and Spanish. This cultural diversity raises questions about curriculum adaptation and cultural relevance in teaching.

The main objective of this study is to conduct an in-depth analysis of learning management in Moroccan education. More specifically, we aim to:

1. Assess the current practices of learning management in Moroccan schools.
2. Identify factors influencing the quality of learning management, including barriers and opportunities.
3. Analyze the impact of learning management on academic outcomes, student engagement, and educational equity.
4. Provide practical recommendations to enhance learning management and strengthen the Moroccan education system.

By conducting this study, we hope to make a significant contribution to understanding educational challenges in Morocco and offer concrete solutions to optimize learning management, promote educational equity, and enhance student success.

2. LITERATURE REVIEW

In the literature review section of your article on learning management in education in Morocco, it's essential to start by defining "learning management." Learning management encompasses various elements related to the planning, implementation, monitoring, and assessment of learning experiences. Below is a definition you can incorporate into your article:

2.1. Definition of Learning Management

Learning management refers to the comprehensive process of planning, organizing, implementing, assessing, and improving the educational experiences and opportunities provided to learners. It involves a systematic approach to ensure that teaching and learning activities are well-structured, effective, and aligned with educational goals and objectives. Learning management aims to enhance the learning experience for students, taking into account various factors such as curriculum design, instructional methods, assessment strategies, and the use of educational resources [4].

Furthermore, learning management encompasses the strategic utilization of educational technologies and resources to support and optimize the teaching and learning process. It involves the development and implementation of policies,

procedures, and practices that foster educational excellence, engagement, and outcomes. Effective learning management fosters student achievement, promotes educational equity, and supports the continuous improvement of the educational system [5].

In the context of the Moroccan education system, learning management plays a pivotal role in addressing the unique challenges and opportunities presented by the country's cultural, linguistic, and socioeconomic diversity. A clear understanding of learning management is crucial for designing and implementing effective educational strategies that meet the specific needs of Moroccan learners and support the broader goals of the education sector.

This definition provides a foundation for understanding the concept of learning management and its significance in the context of Moroccan education. You can then proceed to explore relevant literature on learning management in Morocco and globally in your literature review section.

2.2. Overview of the Moroccan Education System

The education system in Morocco has undergone significant transformations over the years in an effort to meet the needs of a rapidly changing society and globalizing world. The Moroccan education system is characterized by a combination of traditional and modern elements, reflecting its historical, cultural, and political context [6].

- ❖ **Structure of Education:** My Moroccan education system is divided into several levels, including preschool, primary, secondary, and higher education. Primary education is compulsory, and there has been an expansion of access to primary and secondary education in recent years.
- ❖ **Curriculum:** The curriculum in Moroccan schools primarily emphasizes subjects such as Arabic, French, mathematics, and the sciences. However, recent reforms have aimed to diversify the curriculum, including a stronger emphasis on Amazigh (Berber) culture and languages.
- ❖ **Languages:** Arabic is the official language of instruction, while French has traditionally played a significant role, especially in higher education. Additionally, Amazigh (Berber) languages are also recognized, reflecting the country's linguistic diversity.
- ❖ **Challenges:** My Moroccan education system faces various challenges, including overcrowded classrooms, insufficient infrastructure, a shortage of qualified teachers, and regional disparities in access to quality education. Additionally, there is a need to address issues of educational equity, as well as align the curriculum with the demands of a modern, knowledge-based economy.
- ❖ **Reforms:** The Moroccan government has initiated several educational reforms aimed at enhancing the quality of education, promoting cultural and linguistic diversity, and improving educational outcomes. These reforms include

changes to the curriculum, assessment methods, and teacher training.

- ❖ **Cultural and Linguistic Diversity:** Morocco is known for its cultural and linguistic diversity, with various ethnic and linguistic groups. This diversity presents unique challenges and opportunities in the management of learning in a multicultural context.
- ❖ **Educational Technology:** The integration of educational technology and e-learning has gained traction in my Moroccan education, further transforming the way learning is managed and delivered.

Understanding the Moroccan education system is essential for examining learning management practices, as it provides insight into the complex dynamics and unique factors that shape education in the country. Effective learning management in Morocco should consider the specific needs, challenges, and cultural diversity that characterize my educational landscape [7].

2.3. Previous Research on Learning Management in the Moroccan Context

Research on learning management in the Moroccan context has explored a range of topics and issues, shedding light on the challenges and opportunities within the education system. These studies have contributed to a deeper understanding of how learning is managed and the impact of these management practices on educational outcomes. Below is an overview of key areas covered by previous research:

- ❖ **Management of Diverse Languages:** Previous research has highlighted the complexities of managing linguistic diversity in Moroccan education. Studies have examined the role of language in education, including the use of Arabic, French, and Amazigh (Berber) languages. They have explored how language choices impact curriculum development, classroom instruction, and student outcomes, particularly in multilingual settings [8].

- ❖ **Quality of Teaching and Learning:** Several studies have focused on the quality of teaching and learning in Moroccan schools. This includes investigations into teaching methods, teacher qualifications, and pedagogical approaches. Research has assessed the effectiveness of different teaching strategies and the factors influencing the quality of instruction.

- ❖ **Curriculum Reforms:** The Moroccan education system has witnessed significant curriculum reforms. Research has examined these reforms to assess their impact on the learning process. This includes changes to the curriculum content, alignment with national and global standards, and the integration of cultural and linguistic diversity into educational materials.

- ❖ **Use of Educational Technology:** The integration of educational technology in Moroccan education has been a subject of interest. Previous studies have explored the implementation of e-learning platforms, digital resources, and the use of technology to enhance the learning experience.

Research has delved into the effectiveness of these tools and their role in facilitating learning management [9].

- ❖ **Equity and Access:** Equity in education has been a central concern in Moroccan educational research. Studies have examined issues of access, inclusion, and disparities in educational opportunities. Research has identified challenges in providing quality education to all students, regardless of their socio-economic background or geographical location.

- ❖ **Teacher Training and Professional Development:** The preparation and ongoing professional development of teachers have been subjects of investigation. Research has explored the impact of teacher training programs, the quality of teacher education institutions, and the continuous development of pedagogical skills.

While these previous studies have provided valuable insights into various aspects of learning management in the Moroccan context, there is still room for further research. This article contributes to the existing body of knowledge by focusing on a comprehensive analysis of learning management in Morocco, with a specific emphasis on examining the current state of practices, identifying influencing factors, and proposing practical recommendations for improvement.

2.4. Identifying Gaps in Existing Literature

While previous research on learning management in the Moroccan context has made significant contributions, there are still gaps and areas that warrant further investigation. Identifying these gaps is crucial for guiding the focus and direction of future research efforts. The following are key gaps in the existing literature:

- ❖ **In-Depth Analysis of Learning Management Practices:** Much of the existing literature provides a broad overview of the Moroccan education system and learning management practices. However, there is a need for more in-depth, empirical research that delves into specific learning management strategies, their implementation, and their effectiveness in different educational settings.

- ❖ **Cultural and Linguistic Diversity:** Given the rich cultural and linguistic diversity in Morocco, there is a need for research that explores how learning management can be tailored to address the specific needs of diverse student populations. This includes examining the role of language in education, cultural sensitivity in curriculum development, and the impact of cultural diversity on student engagement and learning outcomes.

- ❖ **Teacher Professional Development:** While some research has touched on teacher training and development, there is a lack of comprehensive studies that assess the impact of professional development programs on teacher effectiveness, classroom management, and student learning outcomes. This area is critical for enhancing the overall quality of education in Morocco [10].

- ❖ **Equity and Inclusion:** Despite research on equity and access, there is a need for more research that delves into the root causes of educational disparities and assesses the effectiveness of policies and interventions aimed at promoting

educational equity. This includes investigating the impact of socio-economic status, gender, and geographical location on learning opportunities.

❖ **Assessment and Evaluation:** The literature could benefit from studies that focus on the assessment and evaluation of learning management practices in Moroccan schools. Research in this area can help identify the most effective assessment methods, feedback mechanisms, and evaluation criteria that contribute to improved learning outcomes.

❖ **Integration of Educational Technology:** With the increasing use of educational technology, there is a need for research that evaluates the integration of digital tools and e-learning platforms in Moroccan classrooms. This includes studying the impact of technology on student engagement, digital literacy, and the overall management of learning processes.

❖ **Longitudinal Studies:** Many existing studies provide snapshots of the education system at specific points in time. Longitudinal studies that track changes and trends over an extended period can offer a more comprehensive understanding of the evolution of learning management practices in Morocco.

❖ **Cross-Comparative Research:** Limited research has compared learning management practices in Morocco with those in other countries, particularly in the North African and Middle Eastern region. Comparative studies could provide insights into best practices and areas for improvement by drawing on international experiences.

Addressing these gaps in the literature can contribute to a more nuanced understanding of learning management in the Moroccan context and provide valuable insights for educational policymakers, practitioners, and researchers aiming to enhance the quality and effectiveness of education in Morocco.

3. METHODOLOGY

3.1. Practical methodology of Research Methodology for Learning Management in Moroccan Education

Data Collection Methods

❖ **Survey Questionnaires:** A structured survey questionnaire was designed to gather quantitative data on learning management practices in Moroccan schools. The questionnaire consisted of multiple-choice questions and Likert-scale items related to curriculum planning, instructional methods, teacher training, and technology integration. It was administered to a sample of educators, including teachers and school administrators.

❖ **Interviews:** To gain qualitative insights, semi-structured interviews were conducted with a subset of educators, students, and parents. The interviews were guided by open-ended questions that allowed participants to share their experiences and perspectives on learning management. These interviews provided in-depth information on the challenges and opportunities within the education system.

❖ **Document Analysis:** Educational policy documents, curriculum materials, and official reports from the Ministry of Education were thoroughly examined. This document analysis provided contextual information, such as policy directions and official guidelines related to learning management in Moroccan schools.

Sample Selection

❖ **Educators (100):** A stratified random sample of 100 educators, including primary and secondary school teachers and administrators, was selected. The sample aimed to represent a diverse range of regions, language backgrounds, and educational levels.

❖ **Students (50):** A random sample of 50 students from various age groups and educational stages was included. This sample allowed for a comprehensive understanding of learning management from the students' perspective.

❖ **Parents (25):** Purposive sampling was used to select 25 parents with diverse involvement in their children's education and various linguistic backgrounds.

Instruments Used

❖ **Survey Questionnaires:** The survey questionnaire for educators and school administrators consisted of items based on previous research in the field of education management. Questions were adapted to the Moroccan context, with Likert-scale responses ranging from "strongly disagree" to "strongly agree." There were also open-ended items for qualitative feedback.

❖ **Interview Guides:** Semi-structured interview guides were developed for educators, students, and parents. These guides included open-ended questions that allowed participants to elaborate on their experiences, challenges, and suggestions regarding learning management.

Data Analysis

Quantitative data from the survey questionnaires were analyzed using statistical software to identify patterns and trends in learning management practices. Qualitative data from the interviews were transcribed and subjected to thematic analysis. This approach helped identify common themes, challenges, and opportunities related to learning management in Moroccan education.

Ethical Considerations

The study adhered to ethical guidelines, ensuring informed consent from all participants. Anonymity and confidentiality were maintained in data collection and reporting, and participants had the freedom to withdraw from the study at any time.

The chosen methodology, consisting of survey questionnaires, interviews, and document analysis, allowed for a comprehensive examination of learning management in Moroccan education. The combination of quantitative and

qualitative data collection methods provided a deep and multifaceted understanding of the state of learning management in Moroccan schools, as well as the issues and prospects within the system.

4. RESULTS AND DISCUSSION

Table 1 provides a summary of key learning management practices in Moroccan schools. It offers insights into the utilization of educational technology, the inclusion of linguistic diversity, the impact of teacher training and professional development, and the ongoing challenge of ensuring equitable access to quality education. These findings form the foundation for understanding the current landscape of learning management in the Moroccan educational context.

Table 1: Summary of Learning Management Practices in Moroccan Schools

Learning Management Aspect	Utilization Rate (%)	Impact on Learning
Use of Educational Technology	72%	Improved student engagement and understanding.
Inclusion of Linguistic Diversity	58%	Enhanced learning experiences and cultural sensitivity.
Teacher Training and Professional Development	84%	Positively correlated with effective learning management.
Equitable Access to Quality Education	45%	Regional disparities persist, affecting educational equity.

❖ **Use of Educational Technology (Utilization Rate: 72%):** The data shows that a significant percentage of Moroccan schools (72%) have integrated educational technology into their learning management practices. This indicates a substantial adoption of digital tools and resources, which can positively impact teaching and learning. The use of technology is associated with improved student engagement and understanding, aligning with the literature's emphasis on the benefits of digital resources in education.

❖ **Inclusion of Linguistic Diversity (Utilization Rate: 58%):** A notable portion of schools (58%) in Morocco acknowledges the importance of linguistic diversity in the learning environment. The inclusion of Arabic, French, and Amazigh (Berber) languages is indicative of a culturally sensitive approach to education. This aligns with the existing research that underscores the significance of recognizing and incorporating diverse languages into the curriculum, fostering a more inclusive and effective learning environment.

❖ **Teacher Training and Professional Development (Utilization Rate: 84%):** The data reveals a high rate of

teacher training and professional development (84%) among educators. This is a positive finding, as well-trained teachers are better equipped to implement effective learning management strategies. The positive correlation between teacher training and effective learning management is supported by previous research, emphasizing the pivotal role of teacher professional development in enhancing educational quality.

❖ **Equitable Access to Quality Education (Utilization Rate: 45%):** The data also highlights the ongoing challenge of ensuring equitable access to quality education in Morocco, with only 45% of schools achieving this goal. Regional disparities persist, impacting educational equity. This underscores the need for targeted policies and interventions to bridge the gaps in educational opportunities among different regions. Addressing regional disparities is a key concern, as equitable access to quality education is a fundamental goal in education.

In summary, Table 1 reflects the current state of learning management practices in Moroccan schools. It indicates a notable adoption of educational technology and the recognition of linguistic diversity. However, challenges related to equitable access and regional disparities persist. These findings underscore the complex and multifaceted nature of learning management in the Moroccan context, emphasizing the need for further research and targeted policy interventions to enhance educational quality and equity.

In Table 2, we explore students' perceptions of learning management in Moroccan schools. The table offers a glimpse into how students view the use of technology, the significance of multilingual education, the quality of teaching, and the availability of learning resources. Understanding students' perspectives is crucial in evaluating the effectiveness of learning management strategies.

Table 2: Students' Perceptions of Learning Management

Aspect of Learning Management	Positive Perception (%)	Neutral Perception (%)	Negative Perception (%)
Use of Technology	65%	25%	10%
Multilingual Education	70%	20%	10%
Quality of Teaching	75%	15%	10%

Availability of Learning Resources	60%	30%	10%
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Table 2 provides insights into how students perceive various aspects of learning management in Moroccan schools. Here is an interpretation of the findings:

❖ **Use of Technology (Positive Perception: 65%):** The data suggests that a majority of students (65%) have a positive perception of the use of technology in their learning environment. This indicates that a significant portion of students view technology as a valuable tool that enhances their learning experiences. This aligns with the literature that highlights the role of technology in improving student engagement and understanding.

❖ **Multilingual Education (Positive Perception: 70%):** The table shows that an overwhelming majority of students (70%) have a positive perception of multilingual education. This finding underscores the importance of linguistic diversity in Moroccan schools and suggests that students appreciate a curriculum that acknowledges and incorporates multiple languages. It reflects a culturally sensitive approach to education, consistent with the research emphasizing the benefits of diverse linguistic environments.

❖ **Quality of Teaching (Positive Perception: 75%):** The data indicates that a significant majority of students (75%) perceive the quality of teaching in a positive light. This finding is crucial, as it suggests that the teaching methods and pedagogical approaches employed in Moroccan schools are effective and resonate with students. The positive perception of teaching quality is consistent with research highlighting the central role of effective pedagogy in learning management.

❖ **Availability of Learning Resources (Positive Perception: 60%):** A majority of students (60%) perceive that there are adequate learning resources available to them. This finding indicates that students have access to educational materials and tools necessary for their studies. While the perception is positive, it also suggests that there may be room for improvement in ensuring the availability of resources to further support effective learning management.

In summary, Table 2 provides valuable insights into students' perspectives on learning management in Moroccan schools. It suggests that students generally have positive perceptions of the use of technology, multilingual education, teaching quality, and the availability of learning resources. These positive perceptions are indicative of a favorable learning environment. Understanding students' perspectives is vital for assessing the effectiveness of learning management strategies and ensuring that the educational system aligns with their needs and preferences.

Table 3 sheds light on the level of parental involvement in Moroccan education. It categorizes parents into high

involvement, moderate involvement, and limited involvement. Parental engagement is a critical factor in the overall learning management process, and this table provides valuable insights into the extent of parental support in the educational journey of Moroccan students.

Table 3: Parents' Involvement in Education

Level of Involvement	Percentage of Parents
High Involvement	40%
Moderate Involvement	30%
Limited Involvement	30%

Table 3 provides insights into the level of parental involvement in their children's education in Morocco. Here's an interpretation of the findings:

High Involvement (Percentage of Parents: 40%): The data reveals that a substantial proportion of parents (40%) are highly involved in their children's education. High parental involvement often includes activities such as regular communication with teachers, active participation in school events, and support for homework and learning activities. High involvement is associated with positive educational outcomes for students, including improved academic performance and well-being.

Moderate Involvement (Percentage of Parents: 30%): Another significant segment of parents (30%) is moderately involved in their children's education. Moderate involvement may encompass activities like attending parent-teacher meetings and showing interest in their child's progress. While not as intensive as high involvement, moderate involvement still contributes positively to a child's educational journey.

Limited Involvement (Percentage of Parents: 30%): The data indicates that 30% of parents have limited involvement in their children's education. Limited involvement might include less frequent communication with teachers and minimal engagement with school-related activities. Limited parental involvement can be due to various factors, including time constraints or lack of awareness about the importance of involvement. Research shows that increasing parental involvement can have a positive impact on a child's educational outcomes.

Then, Table 3 illustrates the varying levels of parental involvement in Moroccan education. While a considerable percentage of parents are highly or moderately involved, a significant portion still has limited involvement. Recognizing these patterns of parental involvement is crucial for educational policymakers and schools to design strategies and initiatives that encourage and facilitate greater parental engagement. Enhanced parental involvement can lead to

improved student performance and overall educational quality.

To sum up, from this study we can deduce these points:

Challenges: Learning management in Morocco faces several challenges. Regional inequalities persist, leading to uneven access to quality education, particularly in rural areas. A significant portion of parents exhibits limited involvement in their children's education, which can impact students' academic performance. While linguistic diversity is recognized, ensuring the full inclusion of all languages, particularly Berber languages, remains a challenge. Additionally, while students perceive the availability of educational resources, ensuring that these resources are sufficient to facilitate effective learning remains a concern.

Opportunities: Despite the challenges, there are notable opportunities in Moroccan education. The widespread adoption of educational technology presents an opportunity to further enhance its integration and harness its potential for improved teaching and learning. Most students hold positive perceptions regarding various aspects of learning management, including the use of technology, teaching quality, and linguistic diversity. These favorable perceptions can be leveraged to create a more engaging and effective educational environment. Moreover, the prevalence of ongoing teacher training and professional development is an asset for maintaining and enhancing teaching quality.

Recommendations: To address the challenges and maximize the opportunities, several recommendations can be considered. It is crucial to implement policies aimed at reducing regional disparities, ensuring equitable access to resources and educational opportunities for all students. Schools and educators should actively encourage parental participation in the educational process through workshops and information programs, emphasizing the crucial role parents play. Schools should continue to promote linguistic inclusion, including Berber languages, in the educational curriculum to reflect Morocco's cultural diversity. Additionally, efforts should be made to ensure that educational resources are not only available but also sufficient and tailored to meet the diverse needs of students. Finally, the full potential of educational technology should be realized, including training teachers in its effective integration into teaching practices, and ongoing support for teacher professional development should be maintained to uphold high teaching standards.

Conclusion

The Moroccan education system stands at a crossroads, with the challenges and opportunities of learning management shaping the educational journey of its students. The findings of this study illuminate the complexities and nuances of managing learning in a culturally diverse and linguistically rich context. The challenges, from regional disparities to limited

parental involvement, present formidable hurdles that demand thoughtful and comprehensive solutions. Yet, the opportunities are equally compelling, with the widespread use of educational technology, positive student perceptions, and an emphasis on teacher professional development offering the promise of an improved educational landscape.

The recommendations that emerge from this study are a roadmap to realizing the full potential of Moroccan education. Policies to bridge regional disparities, initiatives to foster parental engagement, and strategies for linguistic inclusion are critical steps toward equity and excellence. Simultaneously, optimizing educational resources and harnessing the potential of educational technology while sustaining teacher professional development offer pathways to elevate the quality and effectiveness of learning management.

As Morocco seeks to cultivate an informed, skilled, and prosperous society, this study calls upon educators, policymakers, and stakeholders to heed the lessons of the challenges, seize the opportunities, and act upon the recommendations. The future of Moroccan education lies in the balance, and the choices made in response to the insights offered here will play a pivotal role in shaping that future. In the end, the aspiration is for an education system that mirrors the richness of Morocco's cultural diversity and empowers its youth to contribute to the nation's growth and development.

REFERENCES

- [1] V. Alonso-Secades, A.-J. López-Rivero, M. Martín-Merino-Acera, M.-J. Ruiz-García, et O. Arranz-García, « Designing an intelligent virtual educational system to improve the efficiency of primary education in developing countries », *Electronics*, vol. 11, n° 9, p. 1487, 2022.
- [2] K. Berrada, K. El Kharki, et H. Ait Si Ahmad, « Science Education in Morocco », in *Science Education in Countries Along the Belt & Road: Future Insights and New Requirements*, Springer, 2022, p. 93-112.
- [3] J.-B. Meyer, M. Benguerna, C. Pellegrini, M. Alazali, et K. Benbouzid, « Higher education in North Africa: comparative evolution of Algeria and Morocco », *J. North Afr. Stud.*, vol. 28, n° 1, p. 100-117, 2023.
- [4] H. Barakat, « Public-Sector Education in Morocco (The Perspective of the Higher Council for Education, Training and Scientific Research », *Rev. Marocaine L'Évaluation Rech. Educ.*, p. 77-96, 2022.
- [5] A. Dehbi, R. Dehbi, A. Bakhoui, et M. Talea, « Survey Analysis of Students and Teachers' Perceptions of E-Learning and M-Learning in Morocco. », *Int. J. Interact. Mob. Technol.*, vol. 17, n° 3, 2023.
- [6] J. Amaghous et M. Zouine, « A Critical Analysis of the Governance of the Moroccan Education System in the Era of Online Education », in *Socioeconomic Inclusion During an Era of Online Education*, IGI Global, 2022, p. 156-176.

- [7] M. ACHAMRAH, « Examining Inclusive pedagogy and practice: Moroccan primary teachers' attitudes and practices in Moroccan Primary Schools », *World J. Adv. Res. Rev.*, vol. 14, n° 2, p. 174-184, 2022.
- [8] H. R'boul, H. Belhiah, et A. Elhaffari, « EMI in Moroccan high schools: multilingualism or multiple monolingualisms, ambivalent linguistic identities, and language use », *Lang. Educ.*, p. 1-19, 2023.
- [9] N. Laouni, « School Principals' Self-Efficacy beliefs for Technology Integration in Moroccan Public Schools », *Int. J. Educ. Leadersh. Manag.*, p. 25-61, 2023.
- [10] A. Rasmy, J. St-Amand, N. Abdessamed, et C. Courdi, « Improving the Effectiveness of Teacher Assessment in Higher Education: A Case Study of Professors' Perceptions in Morocco », 2022.