Newly recruited teachers at the core of the University of Oran's training strategy.

الأساتذة المُوظَّفون حديثًا في قلب إستراتيجية التعليم بجامعة وهران

Dr.MEZILI Imad, LAMEOR Laboratory ,Oran1 University, mezili.imad@univ-oran1.dz.
Dr.SAFI Ahmed, GCLDL Laboratory ,Oran1 University; safi.ahmed@univ-oran1.dz.

Received: 25/02/2026 ; Accepted for reviewing: 01/06/2026 ; Accepted for publishing: 10/06/2026

Abstract:

Algerian university teacher-researchers have dual missions: advancing scientific research for national development and delivering effective pedagogy. To address this, a mandatory 130-hour national training program builds their didactic-pedagogical skills. This paper evaluates this training's efficiency via feedback, examining its objectives, typology, evaluation, and future prospects. A quantitative survey assessed 2021-2023 cohorts at Oran University. Key results highlight the university's crucial role in training success and the teachers' capacity to apply learned skills in practice.

.**keyword**: Education, newly recruited teachers, Training efficiency; TIC, OPAL, Moodle platform
JEL classification code : I23, I28,

Corresponding author: MEZILI Imad, e-mail: mezili.imad@univ-oran1.dz.

1.Introduction:

The evolving needs of the Algerian economy for highly skilled graduates have necessitated significant changes in the higher education and scientific research sector. These changes are aimed at aligning with international standards in terms of qualifications, skills, knowledge, and know-how in the 21st century. As part of this quality assurance approach, teacher-researchers are now being trained by specialists before they embark on their teaching responsibilities.

Teaching is a complex and challenging profession that can be learned and improved throughout its career. Furthermore, this reality means that the teacher is a driving force in the students' learning process. Through his vocation as a producer and disseminator of knowledge, the teacher-researcher is called to play a role as a lever for economic, social and cultural development.

Indeed, if the teacher-researcher is obliged to prepare a course, he is also the author of research development in his discipline and his country. These two missions are inseparable because one complements the other. However, the teacher must equip himself to master research, transforming information into knowledge. It must also exploit and translate this knowledge scientifically through technological innovations.

In this framework of reflection, we will approach a theoretical reading of the works that evoke the importance of ICT in the professionalization of the teacher-researcher. Then, we will present Oran1 University's experience in integrating ICTs as educational means made available to teachers and students. The final part will deal with integrating ICT at the heart of teacher training at the University of Oran 1 Ahmed Ben Bella.

2.ICTs in the professionalization of the teacher-researcher

Today, teacher-researcher training has become a real issue (Bailly et al., 2015). Indeed, it explains why many higher education institutions at

the global and national levels are striving to set up training systems for their teacher-researchers. Thus, the need to promote new forms of learning (Bertrand, 2014) and introduce new teaching practices, particularly ICT, constitute challenges for higher education establishments. In addition, introducing the quality approach in higher education and the evolution of the teacher-researcher profession has favoured the integration of minimal educational training for teacher-researchers. In reality, initial training before entry into the profession did not exist because there is no training leading to the profession of teacher-researcher (Demougeot-Lebel et al., 2012).

In order to meet this need, the Algerian university had the merit of launching training at the national level dedicated to newly recruited teachers. This training is administered just after the teacher is recruited and occurs at the start of the teacher's career (Demougeot-Lebel et al., 2012). On a legal level, the publication of a ministerial decree devoted to the initial training of newly recruited teacher-researchers is a first for Algeria because, in comparison with the French experience, it does not exist until today the organization of professional and educational training for higher education teachers (Adangnikou, 2008).

Ministerial Order No. 932 of July 28, 2016, explains the Ministry of Higher Education and Scientific Research's desire to adopt a national policy that aims to promote ICT in higher education and strengthen teachers' skills in innovative teaching practices. Indeed, using ICT in teaching is generally recommended and can indicate "good practices to follow" (Lietart, 2015). Historically, and since 2012, the University of Constantine1 has been the first Algerian university to implement a training strategy in ICT and teaching practices for the benefit of newly recruited teachers to ensure quality teaching meets the requirements of the teaching offers training. This techno-pedagogical innovation aims to develop teacher skills in educational technologies to improve their teaching practices and introduce them to the different mechanisms of university pedagogy in distance learning and teaching face-to-face. The members of the training team of the distance learning centre of this

university come from different training courses, namely the ICT training provided by the University of Constantine 1, which has made it possible to train nearly 400 teachers since 2012, the PAPS-ESRS program, the master's training in educational technologies (ACREDITE) provided by the University of Cergy Pontoise with the support of the AUF and finally the Algerian-Swiss cooperation program "COSELEARN" for the training of Learning specialists.

Such training ensures quality hybrid teaching that meets society's demands in the digital age. Today, and in response to the national support program (see table no. 3) launched by the supervisory authority (***ministerial order N 932 of July 28, 2016***), the University of Constantine 1 participates in training teachers from all university establishments in the country under the supervision of a team of specialists in the subject.

Table 1.The national training program for newly recruited teachers

N°	Themes	H.V
1	Making contact, policy and objective of university education	**03**
2	Teaching, training and human relations	**03**
3	Pedagogy and psycho-pedagogy in student training-learning	**10**
4	University training between the LMD system and the classical system: Issues and realities.	**05**
5	Teaching and training in LMD: Educational and didactic specificities	**05**
6	Animation techniques for training and tutoring teams	**10**
7	Bibliographic research techniques, development of corpora adapted to the training course	**05**
8	Assessment and establishment of the skills grid	**10**
9	**ICT digital tools C2i level 1 certificate training**	**15**
10	**Teaching methods and tools and ICT**	**05**

N°	Themes	H.V
11	Roadmap for the student project	**05**
12	**Portfolio, internships (practical content and management methods and evaluation grid)**	**05**
13	CEIL language sessions	**10**
14	Written expression techniques and scientific report template	**10**
15	Methods and modalities for creating quality training programs	**10**
16	Setting up training, teaching and environment programs	**05**
17	Specifications and roadmap for the training action	**05**
18	Moral and professional responsibility of the university	**01**
19	Role of the research function	**01**
20	Ethics and professional conduct in university teaching and educational monitoring	**05**
21	Purpose of university education	**01**
22	External relations	**01**
Total hourly volume		**130**

Source: ministerial decree N 932 of July 28, 2016

It is important to emphasize that of the 22 training themes, three themes on ICT are prerequisites for the "ICT and teaching practices" training. In fact, this training aims to develop skills in educational technologies in future teacher-researchers; it involves providing them with the appropriate steps to integrate ICT into their teaching practices and the mechanisms of university pedagogy, making it possible to ensure quality hybrid teaching that meets the demands of society in the digital age.

3.Objectives of training for newly recruited teachers

The LMD system has brought a new teaching approach, which is based on a change in teaching practices and approaches. These changes had to be accompanied by an upgrade of the actors involved in the learning

process. Indeed, applying the LMD reform has suffered resistance to change from actors in the university system. As the driving force behind teaching in the new LMD approach, the teacher had to guarantee quality teaching and mastery of educational technologies. One of the main recommendations for implementing the LMD system was to provide vocational education. However, in the classic system, the transition from student status to assistant status was often rapid or even abrupt, the latter having consequences on the quality of teaching in general and the teaching profession. Indeed, one of the recommendations of the CIAQES was upgrading newly recruited teachers to the standards and requirements of the LMD system. The question arises is, *why train newly recruited teachers in a particular way?* Nevertheless, *how will this training allow them to integrate into the university easily?*

In a study which researchers at CREAD carried out with 332 teachers on the role of ICT in the transition to LMD(Mouhouche & Bensedik, 2009), the researchers affirm that the main difficulties come from the lack of information and training in educational psychology for teachers. Indeed, they call into question the teaching methods and pedagogical approaches of the classical system, in which they were trained because "they often quickly pass from the status of student to that of teacher to whom they are quickly entrusted with teaching responsibilities. The results of this study showed that the teachers surveyed encountered difficulties using ICT to prepare or deliver their lessons, in order of importance as follows:

1. Lack of resources 46%.
2. Internet connection problem 46%.
3. Need for more support in discovering software/tools 44.9%.
4. Lack of time 29.9%.

These results confirm the importance of training and support for teachers in ICT. In addition to these responses, the teachers surveyed noted that if they rarely, if ever, used ICT to prepare or deliver their lessons, the reasons were:

1. Need technical assistance to discover ICT 40.66%.
2. Need for more resources within the establishment 27.4%.
3. Time problems 25.6%.
4. Effort is little encouraged by the hierarchy 21.7%.
5. Unpaid effort 19%.

Mouhouche & Bensedik (2009)affirm that the best way to save time, the LMD being in progress, is to train in ICT by ICT and remotely and train in parallel with the new educational concepts of the LMD inspired by the results of recent research in cognitive psychology and educational technologies advocating active learning methods. For Gherbi, (2006), it is a question of time and training because new assistants have to take on a teaching load for which their university curriculum could have prepared them better. So, to help them overcome these difficulties and professionalize teaching from the start, the university will have to offer educational training intended exclusively for new assistants. The purpose of this training is to dispel the fears of newly recruited teachers in their first steps, to ensure a better quality of teaching and to promote the teaching profession.

Hence, training in ICT and teaching practices for newly recruited teachers becomes imperative. Of these, the Ministry of Higher Education has launched a national training program for newly recruited teachers. At Oran1 University, the head of the coordination unit states that the newly recruited teachers who benefited from this training in both periods (2021-2022 and 2022-2023) were interested in the training and were motivated by the training. Area managers provided psycho-pedagogical activities. They also expressed a need for supervision regarding procedures and information relating to the LMD system. For these teachers, face-to-face training was an opportunity to deepen their knowledge of the LMD system and teaching practices and, above all, to adopt professional behaviour worthy of the teaching profession. These teachers were aware of the importance of their role in their students' learning process. This pushed them to adopt regular attendance during the face-to-face workshops and to request more information on the

training, scientific research, internal procedures and career management aspects. It is important to emphasize that these teachers have adapted with more flexibility in terms of the use of ICT in the training intended for them, according to the head of the coordination unit and specific testers interviewed.

The essential objective of the national training program for newly recruited teachers is to frame this educational training over 130 hours by building didactic-pedagogical skills articulated around an approach centred on learning "teacher-researcher" profession. The objectives of the introduction of this training are as follows:

- Make a training program of over 130 hours available to higher education establishments by building didactic-pedagogical skills based on an approach centred on learning the profession of teacher-researcher.
- There is a need for the progressive acquisition of skills and professionalization of the teacher.
- Involvement of active methods as a means for building knowledge and skills.

This program aims to develop the progressive acquisition of skills and professionalization essential to teaching tasks. It constitutes a working tool/reference which requires the design of training systems inspired by the skills-based approach. It involves active methods to plan and implement to build knowledge and skills. The program's content was the subject of a prior exchange with all parties concerned. The educational support action was coordinated by the Ministry of Higher Education and Scientific Research under the responsibility of a national commission for steering initial and continuing educational training for the benefit of the teacher-researcher. Training in ICT and teaching practices is specific training which aims as its primary objective to acquire **SMART** skills, which is manifested through the following:

- Script a course for hybrid teaching.
- Put a course online.
- Support students online.

- Regulate educational practices.
- Transfer acquired knowledge.

The SMART skill is a set of Knowledge, Know-how, and attitudes to be developed through adapted content spread over four (4) harmonious workshops, namely:

• ***Workshop 1:*** Tools for producing educational resources (remote): This workshop aims to enable the newly recruited teacher to master the organization of a course and use an editorial chain to produce educational documents.

• ***Workshop 2*** Designing a course for (hybrid) teaching: This workshop aims to enable the newly recruited teacher to design a course according to an appropriate educational structure for online teaching.

• ***Workshop 3:*** Course design methodology for (hybrid) teaching: This workshop aims to enable the newly recruited teacher to master the technological tools for designing and posting a course online through the Moodle platform.

• ***Workshop 4:*** Educational monitoring (hybrid): This workshop aims to enable the newly recruited teacher to master the mechanisms of online educational monitoring and adopt reflective practice (motivation levers, online tutoring, classroom climate virtual, evaluation methods, etc.)

4. Definition of the Study Sample

The sample represents teacher-researchers, and due to human, material, and time constraints, information collected via the questionnaire was statistically analyzed using SPSS software. We settled for a random selection of a sample represented by 50 teachers, which is valid for generalizing the study's results.

- **Use of a Likert Scale:**
    - Strongly Agree
    - Agree
    - Somewhat Agree
    - Disagree

- Strongly Disagree

4.1Questionnaire Presentation:

Q1: Does this training enable new teachers to master modern pedagogical skills?)

Q2: To what extent does the training content align with the objectives set by the ministry?

Q3: Do you plan to use the pedagogical tools presented during the training, such as OPAL, in your academic tasks?

Q4: Do you believe you can apply the knowledge acquired during the training in your teaching?

Q5: Was there sufficient guidance and support from trainers during the training stages?)

Q6: Does training in modern pedagogical techniques contribute to improving new teachers' performance?)

Q7: To what extent have you integrated the knowledge and skills acquired during the ICT and pedagogical practices training into your teaching with students since the end of the training?

Q8: To what extent have you integrated the ICT knowledge acquired during the training into your teaching?)

Table 2: Questionnaire Results Analysis

Number / Position		Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree	Total	Arithmetic Mean	Std. Dev	P-value *
Q 1	N	02	15	18	12	03	50	3.18	0.96	0.19
	%	**04**	**30**	**36**	**24**	**06**	**100**			

Q2	N	04	20	18	06	02	50	2.78	0.95	0.10
	%	**8**	**40**	**36**	**12**	**04**	**100**			
Q3	N	06	16	05	15	08	50	3.10	1.28	0.58
	%	**12**	**32**	**10**	**30**	**16**	**100**			
Q4	N	00	00	05	20	25	50	4.40	0.70	0.00
	%	**00**	**00**	**10**	**40**	**50**	**100**			
Q5	N	00	6	20	18	06	50	3.48	0.85	0.02
	%	**0**	**12**	**40**	**36**	**12**	**100**			
Q6	N	3	14	19	12	02	50	3.08	0.94	0.55
	%	**6**	**28**	**38**	**24**	**04**	**100**			
Q7	N	00	07	18	18	07	50	3.50	0.90	0.05
	%	**00**	**14**	**36**	**36**	**14**	**100**			
Q8	N	01	12	15	17	05	50	3.36	1.00	0.15
	%	**02**	**24**	**30**	**34**	**10**	**100**			

* Statistically significant at $\alpha \leq 0.05$ threshold
Source: Survey results

4.2 Analysis of Question Results

Analysis of Question (Q1) Results:
Does this training enable new teachers to master modern pedagogical skills?
The table shows that most respondents "Somewhat Agree" (36%), with an overall mean of 3.18, indicating a neutral-to-slightly-positive perception of the training's effectiveness. However, the response distribution (30% "Agree" and 30% critical) precludes categorical affirmation. The standard deviation of 0.96 reveals moderate dispersion

of opinions around this mean. The p-value (0.19 > 0.05) confirms this result is not statistically significant.

Analysis of Question (Q2) Results:

To what extent does the content align with ministerial objectives?

The mean of 2.78, close to "Agree" (2), suggests perceived alignment between content and objectives, with 48% positive feedback ("Strongly Agree" + "Agree"). The standard deviation of 0.95 indicates relative concentration around this mean. However, the p-value (0.10 > 0.05) invalidates the statistical significance of this trend, preventing definitive generalization.

Analysis of Question (Q3) Results:

Do you plan to use tools like OPAL in academic tasks?

The mean of 3.10 ("Somewhat Agree") masks extreme polarization: 44% positive intent vs. 46% categorical refusal. The high standard deviation (1.28), the strongest in the questionnaire, confirms pronounced dispersion of positions. The non-significant p-value (0.58 > 0.05) underscores that this division cannot be generalized to all teachers.

Analysis of Question (Q4) Results:

Do you believe you can apply acquired knowledge in your teaching?

The very high mean (4.40, close to "Strongly Disagree") reveals massive rejection, with 90% negative responses. The low standard deviation (0.70) confirms consensus around this perceived impossibility. The highly significant p-value (0.00 < 0.05) statistically validates this critical failure of knowledge transferability.

Analysis of Question (Q5) Results:

Was there sufficient guidance from trainers?

The mean of 3.48, between "Somewhat Agree" and "Disagree," reflects majority dissatisfaction (48% negative responses). The standard deviation of 0.85 shows moderate but consistent dispersion around this

trend. The significant p-value (0.02 < 0.05) confirms the statistical reliability of this finding of insufficient support.

Analysis of Question (Q6) Results:

Does training improve teacher performance?

The mean of 3.08 ("Somewhat Agree") indicates perceived limited impact, with only 34% positive responses. The standard deviation of 0.94 reflects moderately dispersed opinions around this neutral position. The non-significant p-value (0.55 > 0.05) precludes concluding a statistically measurable effect on performance.

Analysis of Question (Q7) Results:

To what extent have you integrated ICT/pedagogical skills?

The mean of 3.50, close to "Disagree," signals integration difficulties (50% negative responses). The standard deviation of 0.90 shows contained but real dispersion. The significant p-value (0.05 = α) establishes statistical validity for the entire sample.

Analysis of Question (Q8) Results:

To what extent have you integrated ICT knowledge?

The mean of 3.36, between neutral and negative, reflects partial integration (44% negative vs. 26% positive responses). The high standard deviation (1.00) reveals marked heterogeneity in practices. The non-significant p-value (0.15 > 0.05) prevents definitive conclusions on ICT adoption.

4.3. Hypothesis Test on Guidance and Knowledge Applicability

H_0: Guidance during training is sufficient to enable knowledge application.

H_1: Guidance during training is insufficient to enable knowledge application.

Table 3 : T-Test Results for Guidance and Knowledge Applicability

Variable	N	df	Mean	Std. Dev.	T-tabulated	T-calculated	P-value (2-tailed)
Guidance Quality (Q5)	50	49	3.48	0.85	2.01	**5.97**	**0.000**
Knowledge Applicability (Q4)	50	49	4.40	0.70	2.01	**14.14**	**0.000**
Q4-Q5 Correlation (r)	50	48	–	–	–	**-5.82**	**0.000**

Source: Survey results and statistical processing with SPSS

4.4. Statistical Analysis:

1. **T-Test for Q5 (Guidance):**
   - Comparison to neutral value (3.0): t=5.97
   - $p = 0.000 < 0.05 \rightarrow$ **Reject H_0**
   - Conclusion: Guidance quality is significantly below the required level (mean > 3 = disagreement zone).
2. **T-Test for Q4 (Applicability):**
   - Comparison to neutral value (3.0): t=14.14
   - $p = 0.000 < 0.05 \rightarrow$ **Reject H_0**
   - Conclusion: Application failure is statistically significant (mean 4.40 close to "Disagree").
3. **Correlation Test:**

- Correlation coefficient: r = -0.82
- Significance test: t=−5.82
- p = 0.000 < 0.05 → **Reject H_0**
- Conclusion: Significant inverse relationship (better guidance → better applicability).

5.Global Interpretation:

At significance threshold α = 0.05:
Results reject the null hypothesis (H_0) at three levels:

- Insufficient guidance quality (Q5: p=0.000)
- Significant application failure (Q4: p=0.000)
- Strong variable linkage (r=-0.82, p=0.000)

5.1. Hypothesis Conclusion:

We definitively reject H_0 ($p<0.001$) and confirm H_1:
"Guidance during training is insufficient to enable knowledge application." This conclusion is statistically robust.

5.2 Operational Recommendation:

- 1 trainer per 10 teachers
- 2 practical sessions/week
- Individualized follow-up journal

6. Conclusion

This study evaluates the effectiveness of the national training program for newly recruited teacher-researchers at the University of Oran 1, implemented under Ministerial Decree No. 932 (2016). Although the 130-hour program aims to professionalize teachers through the acquisition of didactic-pedagogical and technological skills (notably via ICT, Moodle, and OPAL), the results reveal significant challenges. The quantitative survey of 50 teachers indicates that while motivation and interest in the content exist, the applicability of acquired knowledge in teaching practice remains limited. Nearly 90% of respondents found it

difficult to apply the training outcomes (Q4), and 48% reported insufficient support from trainers (Q5). Statistical analysis confirms a strong inverse correlation (r = -0.82) between guidance quality and skill transferability, highlighting that pedagogical support is an underoptimized critical lever. These gaps undermine the goal of pedagogical modernization within the LMD system and hybrid teaching framework. To enhance efficacy, concrete measures are essential: a reduced trainer-teacher ratio (1:10), intensive practical sessions, and individualized follow-up. Future research expanding the sample size and incorporating qualitative methods could refine contextual needs.

References:

1. *Adangnikou, N. (2008). Can we speak of research in university pedagogy today in France? Journal of Education Sciences, 34(3), 601–621.*

2. *Adangnikou, N., & Paul, J.-J. (2008). Training in University Pedagogy in France: An offer Still Too Limited. 25th Congress of the AIPU (pp. 195–208).*

3. *Bailly, B., Demougeot-Lebel, J., & Lison, C. (2015). Training Newly Recruited University Teachers : What Outcomes? International Journal of Higher Education Pedagogy, 31(31–3).*

4. *Bertrand, C. (2014). Supporting Pedagogical Transformation in Higher Education (pp. 1–38).*

5. *Demougeot-Lebel, J., & Perret, C. (2011). What do French university teachers expect in terms of pedagogical training and support? International Journal of Pedagogy in Higher Education, 27(27–1).*

6. *Demougeot-Lebel, J., Ricci, J.-L., & Romainville, M. (2012). Cross Perspectives on Training Practices in University Teaching. Savoirs, n° 28(1), 113–133.*

7. *Gherbi, M. T. (2006). Higher Education and the Teacher in the 21st Century : What Future? Communication Science & Technologie, COST, (4), 87–94.*

8. *Lietart, A. (2015). ICT in Education and Pedagogical Innovation in Higher Education: How and Why Are Modes of Human Interaction Evolving in Educational Information Systems ?*

9. *Mouhouche, A., & Bensedik, A. (2009). TICE and the Transition to the LMD System : Pedagogical and Didactic A spects. The CREAD Journal, 25(90), 31–41.*