journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Date of Publication: 04-06-2025 pages: 236-259 Year: 2025 N°: 01 Volume: 39

Pedagogical innovation in algerian higher education: A comparative approach to institutional and teaching practices

الابتكار البيداغوجي في التعليم العالي الجزائري: مقاربة مقارنة للممارسات المؤسسية والتعليمية

Dr.Zineb Haroun
zineb.haroun@umc.edu.dz
Frères Mentouri University Constantine 1

Abstract:

This research examines pedagogical innovation in Algerian higher education, focusing on newly recruited teacher-researchers and pedagogical discourses. It aims to determine whether innovation stems from common practice or professional requirements. The hypothesis posits that innovation reflects an institutional ideal shaped by international influences rather than practical needs. Using official documents and teacher responses, the analysis reveals alignment on innovation's impact on professional skills but highlights divergences in its implementation.

Keywords: Innovation; teachers; university; requirements; professional.

الملخـــص:

تتناول هذه الدراسة الابتكار البيداغوجي في التعليم العالي الجزائري، مع التركيز على كفاءات الأساتذة الباحثين الجدد والخطابات البيداغوجية. وتهدف إلى تحديد ما إذا كان هذا الابتكار نابعًا من الممارسات الشائعة أو من متطلبات مهنية. تنطلق الفرضية من أن الابتكار يعكس نموذجًا مؤسساتيًا مثاليًا متأثرًا بالسياقات الدولية أكثر منه احتياجًا عمليًا. من خلال تحليل الوثائق الرسمية واجابات الأساتذة، تكشف النتائج عن توافق بين الوثائق المؤسساتية وتصورات الأساتذة حول تأثير الابتكار على المهارات المهنية، مع الإشارة إلى وجود تباينات في تطبيقه الفعلي.

الكلمات المفتاحية: ابتكار؛ معلمون؛ جامعيون؛ متطلبات؛ مهنية

1. Introduction:

Pedagogical innovation has become a critical requirement in international higher education, influencing policies, curricula, training frameworks, and teaching practices to foster systemic innovation (Lemaitre, 2018). Recognized as a global phenomenon with varying dimensions, it is particularly advanced in European and North American contexts, which have pioneered approaches to innovation, addressing the nature, perceptions, and challenges of pedagogical experimentation (Béchard, 2001). According to Lemaitre (2018: 2-3), innovation holds a “praxeological” dimension, emphasizing effective improvement actions. It entails transformations in teaching programs, institutional structures, and

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

practices, originating from institutions, field actors, institutional processes, or spontaneous adaptive initiatives.

In the Algerian university context, pedagogical innovation is emphasized as a key competency for newly recruited university teachers, integrated into their training to develop both knowledge and practical skills (MESRS, 2016b)[1]. Frequently linked to information and communication technologies [2], this concept is prevalent in pedagogical discourse and official texts. This article explores the perceptions of university teachers in training regarding pedagogical innovation, focusing on its meaning, characteristics, objects, and relationship to teaching practices. The study seeks to determine whether this integration reflects an institutional alignment with Western academic ideals or fulfills genuine professional needs in pedagogical practice development.

Theoretical frameworks on innovation and pedagogical practices are employed to define and characterize innovation (Huberman, 1973; Cros, 1998, 1999, 2000), contextualize practices (Bru, 1991), and analyze the "relationship to innovation" to understand teachers' perceptions (Marsollier, 2003: 20). These frameworks inform the development of analytical tools for examining official texts and teacher responses, focusing on decision-making levels, teaching practices, and the objects and attitudes associated with innovation. The study evaluates teachers' competencies, their implementation of innovation, and its benefits and limitations.

2. Pedagogical innovation and teaching practices

2.1 Pedagogical innovation: definitional aspects and characteristics

The definitional aspects and characteristics of pedagogical innovation are derived from its object, actors, and context. Definitions by Huberman (1973), Cros (1996, 1999, 2000), and Béchard and Pelletier (2001) encompass these elements. Huberman (1973)

[1]- A training program established by decree no. 932 of July 28, 2016, outlining the modalities of pedagogical support for teacher-researchers.

[2] The integration of ICT in university teaching exemplifies pedagogical innovation, as highlighted by Haddadi et al. (2014), who view it as a new phase in university pedagogy. Grari Yamina's doctoral thesis (2015), titled Technological Innovation as a Pedagogical Tool for the Development of Education in the Algerian Educational System. Case of the Wilaya of Tlemcen, investigates the factors influencing teaching practices in Algerian education, focusing on the impact of ICT integration in school and university settings. Similarly, works presented at the international symposium Pedagogical Innovation at the University: How Do ICTs Contribute to the Improvement of Teaching and Learning in and of French? by Rouabah (2017), Bouhas (2017), and Kadi (2017) explore ICT's role in enhancing activities related to teaching French in higher education.

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Date of Publication: 04-06-2025 pages: 236-259 Year: 2025 N°: 01 Volume: 39

highlights change as a key aspect, involving something new or different, manifested through deliberate actions and sustainable improvements. Cros (2000) emphasizes that this change occurs within a specific context and follows a well-defined process, proposing five components: "novelty, object, change, goal-directed action, and process" (as cited by Béchard, 2001: 258). Novelty is perceived based on existing practices and culture, with change resulting in either new products or improved methods. These arise from a process shaped by stages, temporality, and actors' relationships to the novel element, whether positive or negative, forming profiles such as innovators and resistors (Huberman, 1973).

Béchard and Pelletier (2001), drawing on Huberman (1973) and Stoller (1995), add a pedagogical dimension to innovation, defining it as deliberate action aimed at introducing something new to enhance student learning through interactivity. The improvement of student learning and success is the ultimate goal of educational innovation (CSE, 2006), achieved by consciously modifying practices and introducing new elements into curricula, pedagogy, or organization.

2.2.1 Teaching practices in context

The definitions of innovation emphasize its influence on teaching practices, which possess a dual dimension: the "manner of doing" unique to each individual and the "methods for doing," linked to the teaching function (Altet, 2003: 37). Altet (2003) highlights that this dual dimension incorporates teachers' knowledge, methods, and competencies, applied in alignment with goals, norms, and purposes within a pedagogical context. Pedagogical practices involve "the art of managing the classroom," including organizational and meaning-making aspects, while didactic practices relate to "the art or manner of teaching discipline-specific concepts" (Legendre and Kazadi, cited by Lacroix & Potvin, 2009: online). These practices are embedded in interactive and contextualized teaching-learning models, which have supplanted linear models due to their limitations (Bru, 1991, cited by Talbot, 2009). These systemic models view teaching and learning as complementary yet autonomous processes, shaped by "decision levels" and "contextual variables" (Bru, 1991; Marcel, 2002).

Context significantly affects teaching practices, serving as the primary driver of their variability (Bru, 1991) (Figure 01). Despite this, common decision-making levels can be identified, encompassing "objectives and pedagogical organization" (Marsollier, 1999: 20) and elements like "overall learning objectives," "specific learning difficulties," "didactic approaches," "pedagogical strategies," "task selection," and "evaluation methods" (Marsollier, 1999: 21). Bru (1991) also categorizes teaching practice variables into "didactic variables" (content structuring and implementation), "process-oriented pedagogical

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

variables" (learning dynamics and communication methods), and "contextual variables" (spatial and material organization) (Talbot, 2009: 118). This model integrates decision-making components and variables as stable elements influenced by innovations, offering a framework for observing and assessing practices in real-world contexts.

2.2.2 The concept of "Relationship to pedagogical innovation"

To examine the relationship between teaching practices and pedagogical innovation, we employed the concept of "relationship to innovation" (Marsollier, 2003), which captures teachers' perceptions of innovation through its objects (product, process, novelty, change, competence, action) (Cros, 1996: 18) and their reflections on personal improvements. This relationship manifests in "teachers' behaviors, positions, attitudes, and relationships" (Marsollier, 2003: 17) and can be analyzed through six axes representing different dimensions of innovation (Marsollier, 2003).

- Innovation-Novelty: Innovation as a new procedure or event, absolute or relative, arises from communication, knowledge, or institutional ideals (Marsollier, 2003).
- Innovation-Change: Change, involving resistance, is perceived as a transformative process with "gains" and "losses," requiring teachers to abandon routines and accept inefficiencies or failures (Marsollier, 1999).
- Innovation-Product: Innovation is shaped by its institutional imposition and negotiated acceptance by teachers.
- Innovation-Process: This phased journey involves redefining competencies, addressing constraints, and fostering didactic and pedagogical variability while managing resistance.
- Innovation-Action: Innovation is observed through actions and gestures reflecting both change and destabilization.
- Innovation-Competence: Teachers' professionalism is marked by "flexibility," "adaptability," and "resourcefulness" (Marsollier, 1999: 19).

3. Pedagogical innovation in the Algerian university context

3.1 Methodology

The examination of teachers' conceptions in relation to pedagogical innovation aims to test the hypothesis that discourses employing this concept within the university context oscillate between an ideal pursued by the institution and the practical realities encountered by professionals in the field. We posit that this discursive fluctuation resides in the meanings ascribed to innovation, its objects, and the relationship maintained by field practitioners with pedagogical innovation. To verify this disparity between official declarations and the reality on the ground regarding pedagogical innovation, based on the

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

three dimensions retained in our hypothesis, a content analysis of official texts (categorical analysis) (Albarelo, 2012) was conducted, with a focus on identifying objects potentially at the heart of innovation. Complementary to this analysis and employing a comparative approach, a satisfaction survey was conducted among university teachers with the aim of uncovering their conceptions regarding these objects and their relationship to pedagogical innovation itself.

3.2 The corpus and analytical method

The identification of elements potentially affected by pedagogical innovation is based on two official documents related to Decree No. 932 of June 28, 2016, detailing the modalities of pedagogical support for newly recruited research professors (MESRS, 2016a) and the competency framework outlining the content of the same decree (MESRS, 2016b). The first document specifies 12 competencies to be developed during training, along with a program detailing themes, objectives, and actions. The second document elaborates on these competencies and their components. For brevity, only the competency statements are cited below, with components referenced throughout the analysis as needed:

- C1: Use of classical and modern didactic tools (ICT)
- C2: Ensuring a cognitive environment in the teaching process
- C3: Recognizing the importance of pedagogical dialogue
- C4: Leading a dynamic process for student skill development
- C5: Using group animation techniques in pedagogical situations (tutorials, practical work, internships)
- C6: Learning collaborative work within pedagogical committees and training teams
- C7: Introduction to tutoring and student support practices (internships)
- C8: Mastery of oral and written communication in teaching and research contexts
- C9: Developing initiatives and innovation in knowledge and skills
- C10: Identifying the potential of pedagogical action
- C11: Collective and individual evaluation of progress in knowledge, skills, and attitudes acquisition
- C12: Use of an evaluation grid aligned with institutional training plan objectives

The method used to analyze these documents employs qualitative content analysis to infer decision-making levels and teaching practice variables (Bru, 1991) (Figure 02) from competency statements and their components. This involves identifying semantically and thematically similar expressions and categorizing them under specific decision-making levels or teaching practice variables.

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

Additional data were collected via a questionnaire administered to university professors (Figure 03). The questionnaire examines their perceptions of pedagogical innovation through variables related to its definition, characteristics, objects, and relationships to innovation components. Questions and response options were crafted based on theoretical elements and the 12 competencies.

For the variable "definition of pedagogical innovation," the questionnaire provides 12 response options derived from prior definitions, encompassing concepts like change, adaptation, transformation, invention, and project. For "Characteristics of Innovation," seven options describe its novelty, deliberate nature, context-specific emergence, and process involving interactions and improvements. For "Objects of Pedagogical Innovation," the responses align with 11 teaching practice sub-variables, such as content organization, evaluation methods, and resource utilization.

The variable "relations to pedagogical innovation" is divided into implementation and contributions/limitations. This explores teacher competencies addressed in training and assesses innovation's impact on teaching practices, framed by 10 modalities reflecting innovation as institutional ideals, transformative processes, and professional competencies.

The questionnaire, tested with approximately 40 university teachers, was found to be accessible in terms of its semantic content. Data were collected from 76 teachers, with 39 responses received from diverse disciplines, forming the basis for this case study. The study focuses on understanding perceptions of pedagogical innovation through criteria established in the questionnaire and standardized competencies

3.3 The survey sample

The decision to survey newly recruited university teachers is justified by the existence of official texts that frame their training and enable the observation of subjects likely to be influenced by innovation, yet remain relatively stable. This stability is ensured by the standardization of professional competencies to be developed, irrespective of the disciplinary field of the trainee teachers. Consequently, a survey was conducted among 76 teachers who had undergone this training. Only 39 teachers, from various disciplinary fields such as civil engineering, mechanical engineering, computer science, English, physics, etc., responded to the questionnaire via email. The sociological profile and professional background were not considered, as this study focuses primarily on understanding perspectives on pedagogical innovation according to the criteria established in the questionnaire. Therefore, the results presented here are those of a case study based on the responses from the 39 returned questionnaires.

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

4. Main Results and Discussions

4.1 An overview of the objects of innovation according to official texts

4.1.1 In terms of levels of decision

The analysis of objects susceptible to innovation highlights that the framework considers all decision-making levels in teaching, as reflected in competencies C1, C2, C5, C9, and C10 (Figure 04), except for C4, which pertains only to final objectives. This underscores the strong relationship between the chosen didactic approach and general or specific learning objectives. The thematic and semantic analysis of competencies reveals that didactic approaches must be enriched by research to better understand the teaching-learning process (C1), focusing on student-centered methods (C2), promoting learning autonomy, and addressing generic and specific competencies (C4). Planning principles (C9, C10) include innovative didactic strategies and alignment between teaching and professional insertion (Figure 04).

The relationship between didactic approaches and objectives involves comparing classical and LMD training (C2), detailing disciplinary objectives (C9), operationalizing action plans (C5), and fostering student-centered goals (C10). This convergence emphasizes individualized and collaborative learning (C1), innovative teaching for professional insertion (C10), and competency-based approaches (C4), centered on progression rather than results (MESRS, 2016b: 4).

Further relationships emerge in anticipating learning obstacles and evaluating learner competencies (C3), focusing on teacher-student interactions to identify difficulties and reduce failure rates (C11). Formative assessments tailored to students' needs (C3), performance evaluations (C11), self-assessments (C7), and assessments using tools like written exams and reports (C11) align with a developmental perspective. Competency evaluation grids assess the training's impact on teachers' professional development (C12). Tasks tied to these evaluations include cognitive activities like comprehension and analysis (C3) and academic skills such as bibliographic research and oral training within tutoring frameworks (C7).

4.1.2. Teaching practices

The emergence of student-centered teaching and learning, as identified in the decision-making level of teaching actions, highlights processual pedagogical variables recurring in ten competencies (C2, C3, C4, C5, C6, C7, C8, C9, C11, C12) of the competency framework for newly recruited teacher-researchers (Figure 05). Didactic variables related to content structuring and implementation intersect with these in six competencies (C2, C3, C4, C5, C6, C9) out of nine (C1, C2, C3, C4, C5, C6, C9, C10). Relationships between

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

variables concerning content taught (Bru, Altet, Blanchard-Laville, 2004) and contextual variables (C1, C9, C10) (Figure 05) are further subdivided into sub-elements (MESRS, 2016b).

Key variables, including content selection and organization (C1, C2, C3, C4, C5, C9, C10), operationalization of objectives (C4, C5, C6, C9, C10), and activity choice (C4, C5, C9, C10), converge to foster development for students and teachers through shared competencies (C4, C5, C6, C9, C10). Resource management (C4) involves defining general/specific objectives (C5) aligned with didactics (C1, C2), implemented through shared projects ensuring "teaching process complementarity" (C6). Innovative didactic approaches, such as educational platforms and distance learning (C9), focus on student needs, professional integration, and development (C10).

Pedagogical cooperation (C3) integrates learning dynamics (C2, C3, C4, C5, C7) and active practices (C4) like interactive teaching and problem-solving. Teachers implement facilitation techniques (C5) and support mechanisms (C7) like coaching and tutoring to enhance student integration. The distribution of initiatives across teaching teams (C4, C5, C6, C7) ensures process complementarity (C6) through teamwork and effective communication (C8). Evaluation (C3, C7, C11, C12) adjusts learning/teaching processes (C3), identifies student difficulties (C7), and collects progress data (C11), using evaluation grids (C12) derived from innovative tools (C1) and student-centered designs (C9, C10).

4.2. Teachers conceptions of pedagogical innovation

4.2.1. What pedagogical innovation means

When asked to choose multiple responses to the question "What does innovation mean to you?" (Figure 06), 36 out of 39 teachers agree that innovation entails a change that brings something new and different to teaching. Among them, 31 teachers mention that this change results from prior planning aligned with the shared values of individuals or institutions initiating the innovation process. Additionally, 26 teachers consider innovation to be the result of spontaneous and individual discovery, while 24 acknowledge that it stems from inventions developed in research laboratories. Although these two views regard innovation as a product of the local context, 23 teachers believe it involves adapting practices from external contexts. The exportation of existing practices from other contexts is not the sole source of pedagogical innovation, as 22 teachers perceive it as arising from changes characterized by their novelty and originating from research laboratories. This change, generating novelty, diversity, and inventions, is also viewed by about twenty teachers as aiming to ensure the sustainability of improvements in teaching. However, despite these positive effects of pedagogical innovation, negative perceptions are

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

expressed by around twenty teachers who believe it merely results in superficial transformations of teaching practices.

In contrast to the opinions gathered from teachers who do not reject existing practices but advocate for their adaptation, approximately twenty teachers are adamant about a complete break from previous practices and the implementation of new practices addressing very specific aspects. Other views, expressed by a cohort representing less than half of the sample surveyed, support the idea of innovation as a change initiated by individual (17 teachers) and institutional (11 teachers) actors, targeting imported practices (9 teachers) as well as novel products (7 teachers).

4.2.2. Characteristics of pedagogical innovation

Teachers who expressed their views on the characteristics of pedagogical innovation (Figure 07) recognize its developmental role in student learning (32 teachers), the novelty of its product (29 teachers), the improvement of previous pedagogical methods (32 teachers), as well as its comparative approach between the obtained product and prior practices (27 teachers). The coexistence of the new and the old is situated within a continuum of progress that can only be established through the juxtaposition of these two central points: the enhancement of learning and teaching.

Furthermore, between 20 and 26 teachers acknowledge various components related to innovation, particularly those concerning its context of emergence (26 teachers), the novelty of its object (24 teachers), the process of producing this object (23 teachers), its temporality (23 teachers), as well as the positive and negative reactions of the stakeholders towards the new (23 teachers). It should be noted that around twenty teachers consider this novelty to be the result of an intentional, calculated, and desired change.

From these perspectives, there emerges a near-consensus regarding the dynamic nature of pedagogical innovation, which is driven by existing practices serving as a reference point for outlining the development trajectory (Cros, 1999) and assessing the innovative nature of the products resulting from a production process.

4.2.3. The objects of pedagogical innovation in terms of teaching practices

Based on the modalities with responses from more than half of the sample (Figure 08), pedagogical innovation in teaching practices focuses on materials and resources (ICT, paper/pencil, board, books, video, handouts) (30 teachers), instructional content organization (28 teachers), learner grouping (26 teachers), distribution of initiatives among teaching teams (26 teachers), evaluation methods (24 teachers), activity selection related

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

to instructional content (23 teachers), and temporal organization of teaching/learning (21 teachers).

This focus on contextual variables (materials, learner distribution, temporal organization) underscores the reliance on resources to support content delivery. Innovation in resources, as outlined in the competency framework for newly recruited teachers, emphasizes acquiring traditional and innovative tools through ICT (C1, C10) for professional development and dynamic teaching. Teachers are encouraged to adopt an innovator's profile, continually revising their roadmap (C9) (Figure 05).

Teachers also express interest in innovating didactic variables (content structuring and activity selection) and procedural pedagogical variables (initiative distribution and evaluation methods) (Figure 05). This aligns with a systemic teaching-learning process that integrates theoretical and methodological principles focused on student-centered tasks and pedagogical interactions. However, the operationalization of objectives receives less attention, reflecting a need to align learning objectives with content and students' needs.

Other variables, such as teaching/learning space (16/39 teachers), learning dynamics (15/39 teachers), and communication registers (14/39 teachers), appear less significant (Figure n°08). These factors, vital for fostering pedagogical relationships and skill development, are often marginalized due to transmissive teaching models and large student influxes that hinder individualized and collaborative learning.

4.2.4. The relationships with pedagogical innovation in terms of competencies to be implemented

The need for innovative tools essential to teaching practices is evident among the surveyed teachers, particularly in competencies related to evaluation and its tools (C11, C3, C7, C12), as noted by 22 respondents (Figure 08). These tools encompass various evaluation types (control, continuous, self-evaluation) in different contexts (classroom, institutional, tutoring) and use specific grids tailored to formative, certification, or orientation purposes. Additionally, 21 teachers highlight tools for content organization and implementation (C1, C9, C5, C10, C3, C4, C2), requiring skills like knowledge use (C9), action planning (C5), aligning objectives (C10), and connecting students' mental actions to tasks (C3).

Innovative tools for knowledge exchange (C1) and monitoring (C9) to strengthen ties between universities and socio-economic environments (C10) are also emphasized by about 20 teachers. The operationalization of objectives (C4, C5, C6, C9, C10) and learning dynamics (C3, C2, C4, C5, C7) are viewed as part of the innovation process by 21 and 17 teachers, respectively. However, fewer teachers (12) consider the distribution of initiatives

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

among training teams (C5, C7, C6, C4) and didactic communication (C8) as priorities for innovation.

Teachers prioritize tools for evaluation, taught content, and related tasks, reflecting a focus on disciplinary knowledge transmission and evaluation. This aligns with linear classroom models where learning is viewed as a direct outcome of teaching. The operationalization of objectives has regained importance, highlighting the intrinsic link between objectives and content selection, further emphasizing its role in the teaching-learning process.

4.2.5. The relationships with pedagogical innovation in terms of contributions and limitations

It appears that innovation significantly contributes to teaching practices, as evidenced by the unanimous agreement among the surveyed teachers, who consider it a competency that ensures the teacher's expertise in their field (Figure 10). This expertise is manifested through their knowledge, skills, attitudes, and interpersonal abilities. For twenty-nine teachers, innovation is also associated with teacher behaviors (verbal, gestural, and mental) that are likely to bring about changes in their practices.

Conversely, twenty-eight respondents believe that pedagogical innovation is merely an illusion, a product of the imagination of institutional decision-makers. According to twenty-four teachers, these same decision-makers prescribe innovative products whose acceptance by teachers remains negotiable. Furthermore, twenty-two teachers acknowledge that innovation is one operation among others, enabling a new conception of learning and the development of teacher competence. Other operations in the innovation process involve changes in actions, pedagogical and didactic variables, as well as the implementation of the change itself. Faced with these steps aimed at establishing innovative products, resistance to this process is also acknowledged by about ten teachers due to various constraints and reluctances towards change. However, for about fifteen teachers, this change can occur through transformations, adjustments, or upheavals that ultimately integrate the new by abandoning routines and habits.

Based on these observations, the teachers' relationships with innovation are much more positive than negative, as evidenced by the number of modalities confirming this seven out of ten response modalities. These modalities reflect, in descending order (Figure 10), the innovation-competence relationship (38 teachers), the innovation-action relationship (29 teachers), the innovation-process relationship (22, 18, 16, and 16 teachers respectively), and the innovation-change relationship (15 teachers).

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

Moreover, teachers express skepticism regarding the innovation-novelty relationship (28 and 24 teachers) insofar as it often depends on an institutional actor imbued with idealism rather than a reality grounded in the situation of field professionals.

4. Conclusion

The desire for change and improvement, influenced by both endogenous and exogenous contexts, appears to be the convergence point between the teachers' perspectives and official recommendations. Indeed, individual contributions, research laboratories, scientific advances, and practices from elsewhere are all sources that stimulate pedagogical innovation within a dialectical framework between the two contexts, highlighting their coherence. This coherence can also be ensured, according to both perspectives, by the necessity of using existing practices as benchmarks for the development of the teaching-learning process. This process, upon which both parties do not disagree, can only lead to progress if it is underpinned by essential tools and resources for the teaching and assessment of disciplinary content. This need seems legitimate, provided it focuses on the cognitive development of students and the role of the teacher as an innovator through their contribution to the establishment of pedagogical frameworks that can enhance learning and teaching practices. The concern for constantly advancing one's practices is confirmed by the teachers' perceptions of their relationship with innovation, which prove to be very positive due to the crucial role they attribute to it as a driver of the development of their professional competencies.

However, this enthusiasm is tempered by teachers' perceptions of the superficial nature of pedagogical innovations due to their institutional affiliation, which remains in an idealistic and imaginary realm, detached from the reality of field professionals. This perception, in our view, is due to a distrust of official discourse that typically does not involve teachers as key players in any change process. These same discourses often overlook the issue of contextual variables related to location and space, temporal organization, and the distribution of learners as subjects of innovation. This silence on these subjects is countered by the teachers, who, despite their non-generalizing views on the matter, do not attribute significant importance to them. The lack of interest in official recommendations regarding contextual variables, deemed physical and temporal, does not align with the goal of revitalizing pedagogical interactions, which, according to the collected opinions, are already diminished, as well as the dynamics of learning and the communication register.

This confrontation between official recommendations and teachers' perceptions highlights pedagogical innovation as a professional imperative for the continuous

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –
ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

improvement of teaching practices, organized into "a system of professional practices for teachers" (Bru and Talbot, 2001: 10). This implies "structured invariances," "regardless of the discipline taught" (Bru and Talbot, 2001: 10), which this research has identified in terms of decision-making levels of teaching actions and in terms of teaching practices (Bru, 1991).

However, the objects, contexts, actors, etc., highlighted by teachers in this contribution, such as existing practices, tools and resources, teaching and assessment activities, students' cognitive activities, and the teacher as an innovator, can only be at the heart of innovations through the effective involvement of the institution. The institution must operate within a complementary logic with field practitioners, adopting a strategic vision that will establish innovation as a culture and as a university practice.

Forms and tables

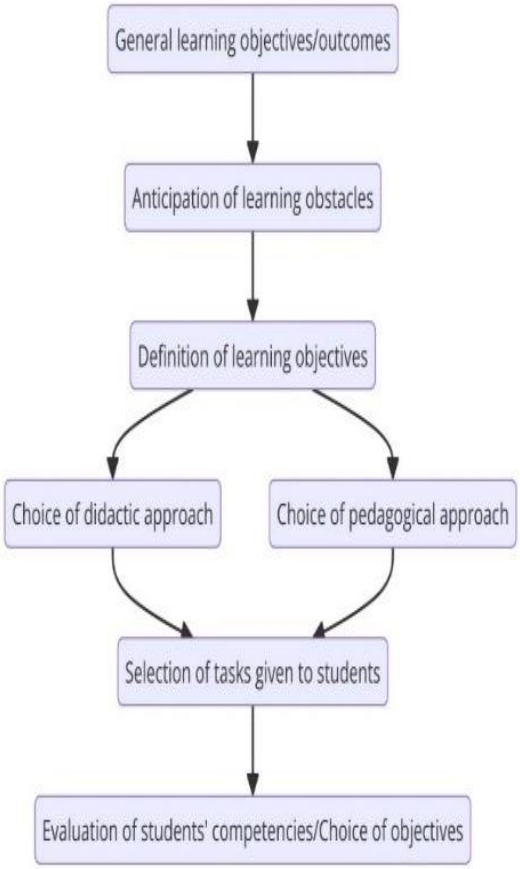

Figure 01: Decision levels according to the contextualized interaction model
Reference of figure: M. Bru (1991)

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Date of Publication: 04-06-2025 pages: 236-259 Year: 2025 N°: 01 Volume: 39

Levels of decision	The general learning objective Learning difficulties and objectives Didactic approaches Pedagogical methods Selected tasks Prescribed evaluations			
Variables of teaching Practices and their types	**Types of variables**	Didactic structuring and content implementation variables	**The variables**	The organization of content to teach The operationalization of objectives The selection of activities related to the Content to teach
		Pedagogical process variables		The learning dynamics The Distribution of Initiatives Among Pedagogical Team Members The Register of Didactic Communication The Evaluation Methods
		Contextual variables related to material framework and setup		The location and space The temporal organization The distribution of learners The materials and supports

Figure 02: The variables and indicators for analyzing official texts
Reference of figure: Bru (1991)

Variables	Number of Modalities	Modalities
Definition of Innovation	12	1. Change involving a lasting improvement; 2. Change resulting from voluntary action; 3. Change derived from the adoption of practices from elsewhere; 4. Change occurring as a result of an invention; 5. Change initiated by decision-makers; 6. Radical change with very specific implications, breaking with previous practices; 7. Change with transformations in terms of invention; 8. Superficial transformation; 9. Adaptation of practices from elsewhere; 10. Laboratory invention; 11. Spontaneous discovery; 12. An invention guided by values.
Characteristics of Innovation	7	1. Novelty perceptible through existing practices; 2. Introduction of a new object (e.g., ICT); 3. Emergence in a specific context; 4. Deliberate, premeditated, and spontaneous change; 5. New product or improved pedagogical methods; 6. Multi-stage process with contrasting outcomes (positive or negative); 7. Improvement in learning outcomes.
Objects of Innovation	11	1. Organization of content; 2. Operationalization of objectives; 3. Selection of teaching activities; 4. Learning dynamics; 5. Distribution of pedagogical initiatives; 6. Communication registers used; 7. Evaluation methods; 8. Learning spaces and environments; 9. Temporal organization of teaching; 10. Organization of learners; 11. Educational materials and tools (ICT, video, etc.).
Relationship to Innovation	10	1. An imaginary institutional ideal; 2. Transformation through the abandonment of routines; 3. Institutional product imposed and negotiable by teachers; 4. Redefinition of learning and competencies; 5. Reassessment of actions in the pursuit of progress; 6. Openness to didactic and pedagogical variability; 7. Resistance and management of constraints and choices; 8. Implementation of change through teacher competencies; 9. Actions of change and destabilization; 10. Professional competency in flexibility and adaptability.

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

Figure 03: The variables and response options of the questionnaire
Reference of figure: Based on the theoretical framework underpinning this research (Bru 1991; Cros 1996)

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Date of Publication: 04-06-2025 pages: 236-259 Year: 2025 N°: 01 Volume: 39

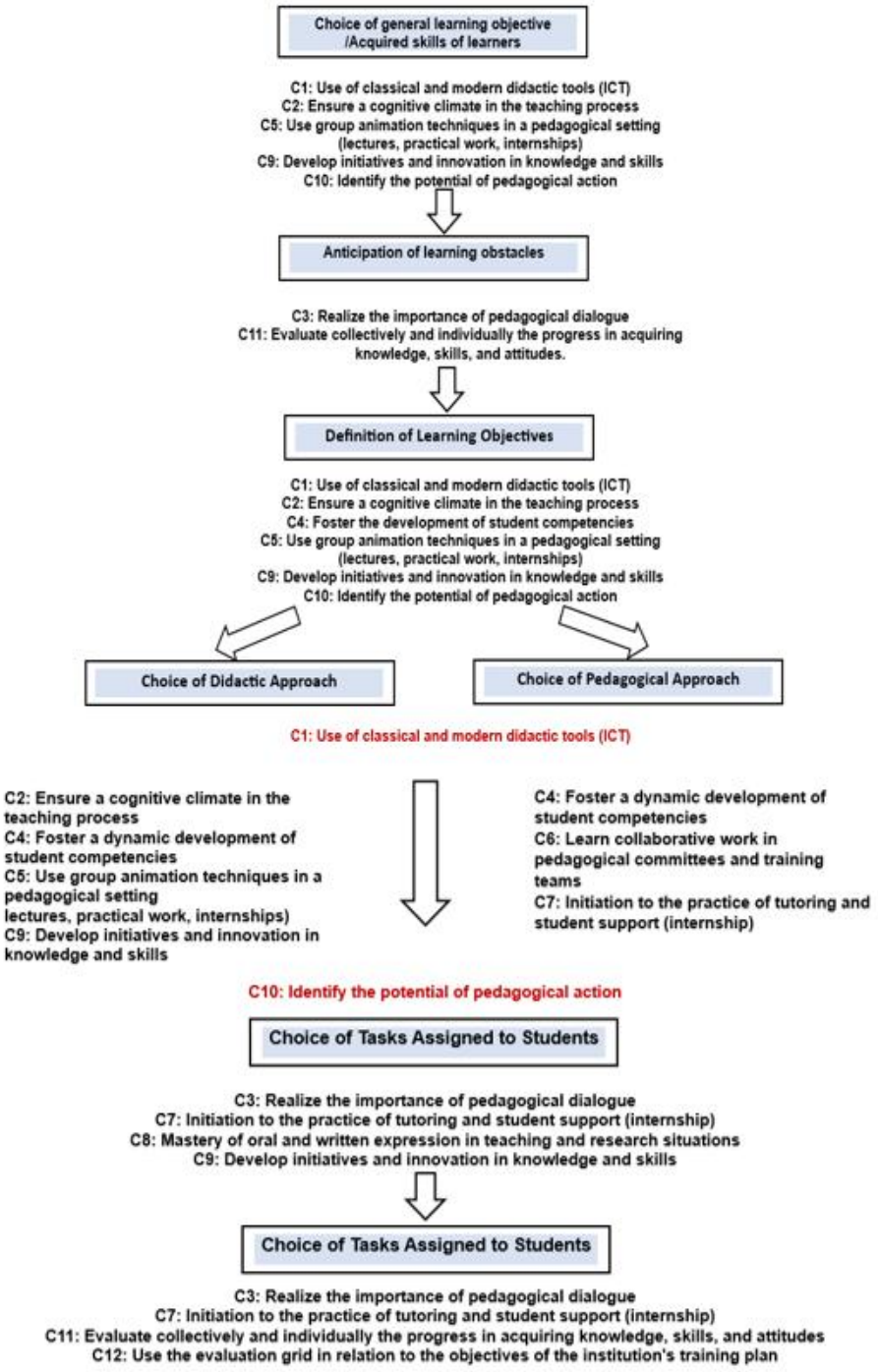

Figure 04: The objectives of innovation in terms of decision-making levels in teaching action

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

Reference of figure: Based on the theoretical framework underpinning this research and the analyzed data (Bru, 1991; MESRS, 2016b)

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Date of Publication: 04-06-2025 pages: 236-259 Year: 2025 N°: 01 Volume: 39

The variables of teaching practices and their types (Bru, 1991)	The types of variables	The didactic variables of structuring and implementing content C1 C2 C3 C4 C5 C6 C9 C10	The variables	The organization of teaching content C1: Use of both traditional and modern didactic tools (ICT) C2: Ensuring a cognitive atmosphere in the teaching process C3: Awareness of the importance of pedagogical dialogue C4: Leading a dynamic development of student competencies C5: Using group facilitation techniques in pedagogical situations (tutorials, practicals, internships) C9: Developing initiatives and innovation in knowledge and skills C10: Identifying the potential of pedagogical action The operationalization of objectives C4: Leading a dynamic development of student competencies C5: Using group facilitation techniques in pedagogical situations (tutorials, practicals, internships) C6: Learning collaborative work within pedagogical committees and training teams C9: Developing initiatives and innovation in knowledge and skills C10: Identifying the potential of pedagogical action The choice of activities related to the teaching content C4: Leading a dynamic development of student competencies C5: Using group facilitation techniques in pedagogical situations (tutorials, practicals, internships) C9: Developing initiatives and innovation in knowledge and skills C10: Identifying the potential of pedagogical action
		The processual pedagogical variables C2 C3 C4 C5 C6 C7 C8 C9 C11 C12		The dynamics of learning C2: Ensuring a cognitive atmosphere in the teaching process C3: Awareness of the importance of pedagogical dialogue C4: Leading a dynamic development of student competencies C5: Using group facilitation techniques in pedagogical situations (tutorials, practicals, internships) C7: Introduction to the practice of tutoring and student support (internships) The distribution of initiatives among the teaching team members C4: Leading a dynamic development of student competencies C5: Using group facilitation techniques in pedagogical situations (tutorials, practicals, internships) C6: Learning collaborative work within pedagogical committees and training teams C7: Introduction to the practice of tutoring and student support (internships) The register of didactic communication C8: Mastery of oral and written expression in teaching and research contexts The Evaluation Methods C3: Awareness of the importance of pedagogical dialogue C7: Introduction to the practice of tutoring and student support (internships) C11: Evaluating collective and individual progress in acquiring knowledge, skills, and attitudes C12: Use of evaluation grids related to the objectives of the institution's training plan
		The contextual variables related to the material framework and system C1 C9 C10		The place and space The temporal organization The distribution of learners The materials and resources C1: Use of both traditional and modern didactic tools (ICT) C9: Developing initiatives and innovation in knowledge and skills C10: Identifying the potential of pedagogical action

Figure 05: The objects of innovation in terms of teaching practices

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria

مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X

ر ت م د: 1112–4040، ر ت م د إ: 2588–X204

المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025

Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

Reference of figure: Based on the theoretical framework underpinning this research and the analyzed data (Bru, 1991; MESRS, 2016b)

Pedagogical innovation means for you:	Nb	% Obs.
A change involving something new or different in teaching	36	92.3%
A project guided by values and programming (schedule of its execution, budget, and evaluation)	31	79.5%
A spontaneous and individual discovery	26	66.7%
An invention developed within research laboratories	24	61.5%
An adaptation of practices from elsewhere to a specific context	23	59.0%
A change involving mutations in terms of inventions	22	56.4%
A change involving sustainable improvement in teaching	20	51.3%
A superficial transformation in teaching	20	51.3%
A radical change involving very punctual actions breaking with previous ones	20	51.3%
A change triggered by voluntary actions	17	43.6%
A change originating from hierarchical authorities and central decision-makers	11	28.2%
A change involving the use of practices applied elsewhere	9	23.1%
A change considered as an invention	7	17.9%
Total	**39**	

Figure 06: Definition of pedagogical innovation
Reference of figure: Established using the Sphinx IQ software

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –
ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

Pedagogical innovation is characterized by:	Nb	% Obs.
its concern to improve student learning	32	82.1%
its new product or an improvement of previous pedagogical modalities	29	74.4%
its new character, perceptible from existing teaching practices	27	69.2%
its emergence in a particular context	26	66.7%
the introduction of a new object, such as new technologies	24	61.5%
its process, which includes several steps carried out over a defined time and interactions (positive or negative) with actors	23	59.0%
its deliberate, premeditated, and voluntary change	20	51.3%
Total	**39**	

Figure 07: The characteristics of pedagogical innovation

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –
ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

Reference of figure: Established using the Sphinx IQ software

Pedagogical innovation related to teaching practices may involve:	Nb	% Obs.
Materials and resources (ICT, paper/pencil, blackboard, books, videos, handouts, etc.)	30	76.9%
Organization of teaching content	28	71.8%
Organization of learners (Class group, by needs, heterogeneous, homogeneous, individualized management)	26	66.7%
Distribution of initiatives between pedagogical team, teachers, and learners	25	64.1%
Evaluation modalities (Object, evaluation criteria, evaluation practices, evaluation tools, types of evaluation, etc.)	24	61.5%
Choice of activities based on teaching content	23	59.0%
Temporal organization of teaching/learning	21	53.8%
Operationalization of objectives	19	48.7%
Place and space of teaching/learning	16	41.0%
Learning dynamics (motivation, sanctions, etc.)	15	38.5%
Communication register (researched, formal, technical, familiar, academic, restricted, elaborate)	14	35.9%
Total	**39**	

Figure 08 The objects of pedagogical innovation
Reference of figure: Established using the Sphinx IQ software

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –
ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

In relation to the training provided to newly recruited teachers, the pedagogical innovation related to your teaching practices is situated at the capacity level of:	Nb	% Obs.
using classical and modern teaching tools (ICT) (C1)	28	71.8%
developing initiatives and innovation in knowledge and skills (C9)	26	66.7%
collectively and individually evaluating progress in the acquisition of knowledge, skills, and competencies (C11)	24	61.5%
using group animation techniques in pedagogical settings (seminars, labs, projects) (C5)	24	61.5%
using evaluation grids related to the objectives of the training plan of the institution (C12)	23	59.0%
tutoring and supporting students (internships) (C7)	23	59.0%
identifying the potential of pedagogical actions (C10)	21	53.8%
raising awareness of the importance of pedagogical dialogue (C3)	19	48.7%
learning collaborative work in pedagogical committees and training teams (C6)	18	46.2%
fostering a dynamic development of students' skills (motivation and self-directed learning) (C4)	17	43.6%
ensuring a cognitive climate in the teaching process (C2)	15	38.5%
mastering oral and written expression in teaching and research settings (C8)	12	30.8%
Total	**39**	

Figure 09: The relationship to pedagogical innovation in terms of competencies

Reference of figure: Established using the Sphinx IQ software

Pedagogical innovation related to your teaching practices through the training of newly recruited teachers is:	Nb	% Obs.
a skill among the competencies ensuring the teacher's professionalism, expressed in terms of flexibility, adaptability, expertise, and resources	38	97.4%
an action in terms of words, gestures, and efforts that bring about change and destabilization	29	74.4%
an ideal that exists only in the imagination of the institution and decision-makers	28	71.8%
a product imposed by the institution and decision-makers, whose acceptability is negotiable by teachers	24	61.5%
a process of redefining the teacher's learning and competency	22	56.4%
a process of questioning actions through the adoption of the idea of progress	18	46.2%
a process of opening up to greater didactic and pedagogical variability	16	41.0%
a process of implementing change through the teacher's skills and knowledge	16	41.0%
a transformation, an adjustment, and an upheaval that allow the apprehension of new ideas by abandoning habits and routines	15	38.5%
a process of resistance (managing constraints and resources, evaluating the relevance of choices, and reluctance)	11	28.2%
Total	**39**	

journal of Emir Abd El kader University of Islamic Sciences
Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية
– قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Volume: 39 N°: 01 Year: 2025 pages: 236-259 Date of Publication: 04-06-2025

Figure 10: The relationship to pedagogical innovation in terms of contributions and limitations

Reference of figure: Established using the Sphinx IQ software

6. References

6.1 Reviews

– Altet, M. (2003). Characterizing, explaining, and understanding teaching practices to also contribute to their evaluation. Educational Science Files, 10, 31-43. [https://doi.org/10.3406/dsedu.2003.1027]

– Béchard, J.-P. (2001). Higher education and pedagogical innovations: A literature review. Educational Sciences Review, 2(27), 257-281. [009933ar.pdf (erudit.org)].

– Béchard, J.-P., & Pelletier, P. (2001). Development of pedagogical innovations in universities: A case of organizational learning. New spaces for professional and organizational development, 131-149. Sherbrooke: Editions du CRP.

– Bru, M., Altet, M., & Blanchard-Laville, C. (2004). The search for characteristic processes of teaching practices in relation to learning. French Journal of Pedagogy, 148, 75-87.

– Cros, F. (1998). Innovation in education and training: Towards the construction of a research object? Permanent Education, 1(134), 34-45.

– Cros, F. (1999). Innovation in education and training in all its senses. Research & Training, 31, 127-136.

– Lemaitre, D. (2018). Pedagogical innovation in question: Analysis of practitioner discourse. International Journal of Higher Education Pedagogy, 1(34), 1-21. [http://journals.openedition.org/ripes/1262

– Marcel, J.-F. (2002). The concept of contextualization: An instrument for studying teaching practices. French Journal of Pedagogy, 138, 103-113. [https://doi.org/10.3406/rfp.2002.2868] .

– Marsollier, C. (1999). Pedagogical innovation and professional identity: The concept of "relationship to innovation". Research & Training, 31, 11-29. [Innovation pédagogique et identité professionnelle : le concept de « rapport à l'innovation » - Persée (persee.fr)].

– Marsollier, C. (2003). Pedagogical innovation: Its figures, meaning, and challenges. Expressions Journal, 22, 9-32. [document (univ-reunion.fr)].

6.2 Books

– Albarello, L. (2012). Learning to research. Brussels: De Boeck.

– Altet, M. (2002). Teacher professional training. Paris: PUF.

journal of Emir Abd El kader University of Islamic Sciences Constantine- Algeria
مجلة جامعة الأمير عبد القادر للعلوم الإسلامية – قسنطينة الجزائر –

ISSN: 1112-4040 & EISSN: 2588-204X
ر ت م د: 1112–4040، ر ت م د إ: 2588–X204
المجلد: 39 العدد: 01 السنة: 2025 الصفحة: 236–259 تاريخ النشر: 04–06–2025
Date of Publication: 04-06-2025 pages: 236-259 Year: 2025 N°: 01 Volume: 39

– Bru, M. (1991). Didactic variations in the organization of learning conditions. Toulouse: Southern University Press.

– Cros, F. (1996). Innovation in education and information. NOVA database. Conceptual framework and user guide. Paris: INRP.

– Huberman, M.-A. (1973). How changes occur in education: A contribution to the study of innovation. Paris: UNESCO/BIE.

– Talbot, L. (2009). Formative assessment: How to assess to remedy learning difficulties. Paris: Armand Colin.

6.3 Institutional documents

- Higher Council for Education. (2006). The dialogue between research and practice in education: A key to success. Report on the state and needs of education 2004-2005. [https://www.cse.gouv.qc.ca/fichiers/documents/publications/CEBE/50-0182.pdf].

- Ministère de l'Enseignement Supérieur et de la Recherche Scientifique. (2016a). Decree No. 932 of July 28, 2016, establishing the modalities of pedagogical support for the benefit of teacher-researchers. [FR_Arrêté_ 932_du_28_juillet_2016.pdf - Google Drive].

- Ministère de l'Enseignement Supérieur et de la Recherche Scientifique. (2016b). The competency framework for newly recruited teacher-researchers. [http://www.umc.edu.dz/images/Ref-Comptences--enseignant-fin-1-1-1.pdf] .