

Received Date: 22 February 2026

Accepted Date: 14 March 2026

Published Date: 2 April 2026

## **Students' views on the implementation of the Bachelor's-Master's-Doctorate system at the Higher Institute of Medical Techniques in Mbandaka, City of Mbandaka, in the Democratic Republic of Congo**

**Mundongo Indongo Audin<sup>1</sup>, Nyafe Basele Henri Stanley<sup>1</sup>, Augustin Tshitadi Makangu<sup>2</sup>**

1. Department of Nursing Sciences, Higher Institute of Medical Techniques of Mbandaka, City of Mbandaka, Equateur Province, Democratic Republic of Congo, [henrinyafe@gmail.com](mailto:henrinyafe@gmail.com)
2. ISTM Kinshasa Doctoral School, Department of Nursing Sciences, Higher Institute of Medical Techniques of Kinshasa, City of Kinshasa, Democratic Republic of Congo.

### **Abstract**

This research explores the transition to the Bachelor's-Master's-Doctorate (LMD) model at ISTM-Mbandaka, a reform initially aimed at international standardisation and the professional integration of graduates.

The central objective is to assess students' perceptions in order to identify the barriers to the social acceptability of this structural change.

Using a qualitative phenomenological methodology, the study involved semi-structured interviews with 22 students, supplemented by a literature review.

The results reveal a predominantly administrative adoption: whilst management by semesters and credits has been established, the Competence-Based Approach (CBA) remains poorly implemented. Students' experiences are marked by academic stress linked to the concentration of exams, as well as by a major digital divide that hinders their ability to access resources independently.

The discussion highlights a 'superficial shift to semesters', where the change in the academic calendar has not yet brought about the expected pedagogical transformation of the learner's role.

In conclusion, the success of this reform at ISTM-Mbandaka requires moving beyond the regulatory framework through concrete investment in digital infrastructure, the harmonisation of academic supervision through the ' ' initiative, and the introduction of postgraduate programmes to meet students' growing desire for specialisation.

**Keywords:** Opinion, Student, Implementation, LMD system.

### **1. Introduction**

Higher education worldwide is undergoing a profound transformation driven by the globalisation of knowledge and the need for greater academic mobility.

Internationally, higher education is undergoing a phase of profound change driven by the globalisation of knowledge and the need for greater academic mobility. The BSc-MSc-PhD system, resulting from the Bologna Process, has established itself as the universal standard aimed at harmonising study

pathways and promoting graduate employability. In the public health sector, this issue is crucial: the complexity of emerging diseases and advances in medical technology require professionals who are not only technically competent but also capable of adapting to international standards of care (World Health Organization [WHO], 2022).

In Africa, the adoption of the BSc-MSc-PhD system is seen as a lever for modernisation to address the mismatch between university education and the realities of the labour market. For the Democratic Republic of the Congo (DRC), Framework Law No. 14/004 of 11 February 2014 laid the foundations for this reform, which has been made compulsory in all higher and university education institutions (HUE) since the 2021–2022 academic year (Ministry of HUE, 2021). The objective is twofold: to improve the quality of healthcare provision through more vocational training and to bring the country into line with sub-regional standards.

The implementation of the Bachelor’s-Master’s-Doctorate (LMD) reform in Equateur Province is part of a drive towards national standardisation, but it faces specific infrastructural challenges. In Mbandaka, the shift from a lecture-based teaching model to a student-centred model requires constant digital connectivity and access to scientific databases – resources that are often lacking in institutions in the hinterland. As Milo (2022) points out, the digital divide between urban centres such as Kinshasa and provincial towns constitutes the main bottleneck for the implementation of LMD teaching models.

In the specific field of healthcare, this transition requires not only theoretical materials but also simulators and well-equipped laboratories to validate practical skills. However, implementing this reform in a context of socio-economic fragility limits students’ ability to engage in self-directed learning. Mukendi (2023) highlights that Congolese students in provincial areas often find themselves in a “paradoxical duality”: they are expected to take an active role in their own education in line with the LMD philosophy, whilst lacking the basic technological tools to carry out their own research.

In short, ISTM-Mbandaka illustrates this challenge, where structural innovation must contend with outdated infrastructure. For Tshilombo and Kabeya (2021), without massive investment in digital libraries and a stable power supply, the LMD risks being limited to an administrative reform rather than becoming a qualitative revolution in medical education.

At the Institute Superior of Techniques Medicals (ISTM-Mbandaka), the transition to the LMD system is now a reality.

However, observations on the ground reveal a disconnect between the theoretical requirements of the new framework (centred on student autonomy and the use of ICT) and the daily experiences of learners. There is some confusion regarding the allocation of credits, a perceived overload of teaching hours, and growing concern about the real value of the new qualifications in the local labour market. As Nzau (2023) points out, the success of an educational reform depends not only on its administrative relevance, but essentially on its social acceptability among the key stakeholders: the students.

This study aims to analyse the views of students at ISTM-Mbandaka regarding this structural change. The aim is to understand whether this reform is perceived as an opportunity to enhance skills or as an additional constraint imposed by the hierarchy. By exploring perceptions, expectations and the difficulties encountered, this research aims to provide suggestions for adjustments to ensure a smoother implementation of the BSL system within this healthcare institution.

What is the overall perception of ISTM-Mbandaka students regarding the implementation of the LMD system, and to what extent does this new model influence their sense of professional competence?

The main objective of this research is to analyse the opinions and perceptions of ISTM-Mbandaka students regarding the implementation of the LMD system, in order to identify the factors influencing their acceptance of or resistance to this new educational model.

## **2. Methodology**

### **2.1. Study design**

This research adopts a qualitative, descriptive approach. This design was chosen because of the need to explore in depth the perceptions, opinions and subjective experiences of students regarding the transition to the BSc-MSc system. Unlike quantitative methods, which measure frequencies, this model promotes the emergence of meaning and an understanding of socio-pedagogical adaptation processes within a medical institution (Dépelteau, 2020).

### **2.2. Presentation of the study setting: ISTM Mbandaka**

The Institute Superior of Techniques Medicals (ISTM) in Mbandaka is located in the capital of Equateur Province, in the Democratic Republic of the Congo. Its geographical location enables it to serve a vast forested and riverine area, thereby playing a leading role in training healthcare

professionals for the entire north-western region of the country (Ministry of Higher Education, 2021).

Originally founded to address the shortage of qualified healthcare professionals in the former Équateur Province, ISTM Mbandaka has modernised to align with national higher education standards. Its core mission is to train specialist technicians and nursing staff capable of meeting the healthcare needs of local and national populations. In accordance with the regulatory framework for Higher and University Education (ESU, 2021), the institution has a mandate to promote high-quality medical expertise, professional ethics and scientific research applied to healthcare.

Organisationally, the institute has a hierarchical structure in which a Management Committee oversees the academic, administrative and financial departments. The sections and departments, such as Nursing Sciences or Community Health, form the basis of the educational organisation, ensuring the implementation of programmes and the coordination of clinical placements (Tshilombo & Kabeya, 2021).

The choice of this institution as a research setting is justified by its strategic position as a pioneering institution in the implementation of the LMD reform in a provincial setting. According to Mputu (2022), studying this environment allows for an understanding of the specific challenges associated with isolation, particularly access to digital resources and the standardisation of teaching practices. Furthermore, the diversity of its student body offers, according to Nzau (2023), an ideal setting for analysing the influence of reforms on the quality of medical education in semi-urban areas.

### **2.3. Population and sampling**

The sampling for this research targeted all students enrolled at ISTM-Mbandaka (which constitutes the study population), identified as the key actors in the transformations resulting from the roll-out of the BSc-MSc-PhD system in the DRC (Mucchielli, 2021). To form the study group, we opted for a non-probabilistic approach based on reasoned choice, or purposive sampling, in order to select participants with first-hand experience of the phenomenon, thereby prioritising data depth over statistical representativeness (Fortin & Gagnon, 2022). The inclusion of participants was based on four main criteria: being enrolled at the institute for the current academic year, belonging to cohorts that had completed at least one full cycle under the new system, having provided free and informed consent, and being present on site during the data collection phase (Paille & Mucchielli, 2021). The sample size was set at 22 students based on the principle of theoretical

saturation, the stage at which the addition of new testimonies no longer yields new insights, this volume being considered sufficient in a qualitative approach to explore the diversity of opinions regarding pedagogical change (Quivy & Van Campenhoudt, 2022).

### **2.4. Method, Techniques and Data Collection Tools**

This research favours the phenomenological method, an approach that allows us to focus on interpreting the meaning that students attribute to their experiences within the new educational framework. This methodological choice facilitates immersion in the learners' subjective world in order to identify the essence of the phenomena associated with the pedagogical transition (Giorgi, 2021).

To collect the necessary data, two complementary techniques were employed: semi-structured interviews and documentary analysis. The semi-structured interview forms the cornerstone of the investigation, offering the flexibility required to explore specific themes whilst ensuring participants the freedom to express their deepest opinions (Berthier, 2022). At the same time, the documentary analysis involved a review of legal texts and ministerial guidelines, thereby enabling a comparison of the official standards of the LMD reform with the empirical realities reported by the students (Karsenti & Savoie-Zajc, 2023).

The interview guide was the main tool used for this data collection, structured around themes such as knowledge of the system, teaching methods and career prospects to ensure consistency in the collection of testimonies (Albarello, 2021). Finally, the use of a digital recorder, subject to the participants' consent, ensured the completeness and accuracy of the transcriptions, thereby neutralising any potential memory biases (Blanchet & Gotman, 2022).

### **2.5. Data collection process**

Data collection was structured around three major stages to ensure the scientific rigour and integrity of the process. The first phase, of a preparatory and administrative nature, involved obtaining legal authorisations from the management of ISTM Mbandaka to establish a relationship of trust with the faculty authorities (Sari & Olivieri, 2021). It was also during this period that the interview guide was pre-tested with students outside the sample to optimise its clarity and duration (Lavallée, 2022). The contact and contractualisation phase then enabled us to meet participants individually to present the study's objectives and confidentiality guarantees. This stage was formalised by the signing of an informed consent form, guaranteeing participants' right to withdraw (Foucher & De

La Ville, 2023), and by planning a schedule of meetings adapted to academic constraints. Finally, the interviews were conducted in a quiet space conducive to free expression, with each session lasting approximately forty-five minutes and being recorded with the participants' consent. By adopting a stance of active listening and neutrality (Boutin, 2021), the researcher continued the discussions until the saturation point was reached, at which point the addition of new data no longer altered the categories of analysis (Creswell & Poth, 2022).

## **2.6. Analysis and processing of results**

Data processing is based on a rigorous methodology of discourse reduction and interpretation, structured around thematic content analysis to transform raw testimonies into an organised body of data (Paillé & Mucchielli, 2021). The initial phase of transcription and immersion enabled the conversion of audio recordings into text format, followed by careful and repeated reading of the corpus to ensure the accuracy of the analyses in relation to the original statements (Dumez, 2021). The process continued with open coding to identify units of meaning, which were grouped into thematic categories using a mixed approach combining conceptual deduction and field-based induction (Negura, 2023). Subsequently, a cross-sectional analysis was carried out to identify convergences and divergences between the interviews, thereby enabling the identification of general trends whilst respecting the uniqueness of individual experiences. This final interpretation correlates the observed themes with the scientific literature to give them socio-pedagogical significance (Wanlin, 2022). Finally, although the process remained essentially intellectual, the use of standard word processing tools facilitated the manual collation of verbatim transcripts, thereby maintaining constant proximity to the qualitative data and avoiding excessive mechanisation of the interpretation (Lejeune, 2023).

## **2.7. Ethical considerations**

This study was conducted in accordance with the fundamental ethical requirements of the social sciences, thereby ensuring the integrity of the research through the protection of participants and the transparency of the process (Deslauriers & Kérisit, 2021). Participants' involvement was based on the principle of free and informed consent, ensuring that each student agreed to contribute without coercion after receiving a comprehensive explanation of the study's objectives (Mazières & Enlart, 2022). At the same time, anonymity was guaranteed through the use of a coding system and the removal of personal data during the transcription phase, thereby preventing any risk of stigmatisation (Grawitz, 2022). This confidentiality was reinforced by secure management of the recordings. Furthermore, the study ensured beneficence

and non-maleficence by fostering a climate of benevolent neutrality, avoiding any social or psychological harm during interactions (Hennion & Vidal-Naquet, 2023). Finally, scientific integrity was demonstrated through a faithful reproduction of the testimonies collected and rigorous referencing of the authors consulted, ruling out any manipulation of results or instances of plagiarism (Beaud & Weber, 2022).

### 3. Results

**Table 1:** Sociodemographic and academic profile of respondents (n = 22)

ID code	Age	Gender	Course	Year
E01	20 years	M	Nursing	L1
E02	21 years	F	Midwifery	L1
E03	22 years old	F	Nursing	L2
E04	23 years old	M	Medical Technology	L2
E05	21 years old	F	Healthcare Organisation Management	L1
E06	24 years	M	Nursing Sciences	L3
E07	25 years	F	Midwifery	L3
E08	20 years	M	Medical Technology	L1
E09	22 years	F	Nursing Sciences	L2
E10	28 years old	M	Healthcare Organisation Management	M1
E11	30 years	F	Nursing Sciences	M2
E12	23 years	M	Midwifery	L2
E13	24 years	F	Nursing	L3
E14	22 years old	M	Medical Technology	L2
E15	21 years old	F	Midwifery	L1
E16	26 years old	M	Nursing	M1
E17	23 years old	F	Healthcare Organisation Management	L3
E18	20 years	M	Nursing Sciences	L1
E19	24 years	F	Medical Technology	L3
E20	29 years old	M	Nursing	M2
E21	22 years old	F	Midwifery	L2

E22	25 years	M	Healthcare Organisation Management	L2
-----	----------	---	------------------------------------	----

Analysis of the socio-demographic data reveals a heterogeneous sample, which is a true reflection of the institution's student body. The group's composition is perfectly balanced, with eleven men and eleven women, thus ensuring a diversity of perspectives in the evaluation of the reform. The population is characterised by its youth, with of students aged between twenty and thirty, encompassing both fresh graduates and professionals currently specialising at Master's level.

Academically, the study covers the four main streams, with Nursing being the most represented, followed by Midwifery, Health Organisation Management and Medical Technology. Finally, the breakdown by cohort provides an overview of the entire Bachelor's-Master's programme. This approach allows us to compare the perspectives of first-year students, who are directly immersed in the new system, with those of final-year students, whose experience enables a concrete assessment of the educational transition.

#### **Theme 1: Knowledge and understanding of the LMD system.**

**Sub-theme 1:** Level of understanding of the system, sources of information, perceived changes and information provided prior to enrolment.

The comments gathered illustrate contrasting realities: *"The LMD is a system with three cycles; each semester awards credits"* (L3 student); *"We've moved from two semesters a year; we have credits but I'm not quite sure what they're for"* (L2 student); *"It was the teaching methods lecturer who explained it to us in the first lecture"*; *"I found out about the LMD when I enrolled; nobody told me anything at secondary school."*

The analysis reveals an uneven grasp of the fundamentals of the reform. Whilst a minority of students understand the relationship between the cycles and the teaching units, the majority of learners limit their understanding to the simple temporal division of the semesters. Members of the teaching staff remain the primary source of information, compensating for the lack of official or institutional communication materials. The most striking change remains the frequency of exams, although adaptation to the system is hampered by a glaring lack of information prior to entering the institute.

## **Theme 2: Perception of teaching methods and the competence-based approach (CBA).**

**Sub-theme 2:** Current organisation of courses, knowledge of the competency-based approach, skills development, day-to-day experience and academic support.

Students report: *“We have lectures in the morning, practical sessions in the afternoon sometimes, and hospital placements”*; *“It’s about learning to do rather than learning by heart”* (, for the few who are familiar with it); *“The placements teach us how to apply dressings and give injections”*; *“It depends on the lecturers. Some don’t even understand the BSc system themselves”*.

Although the organisation of activities is perceived as more rigorous, the central concept of the APC remains unclear or is ignored by almost all participants. Learning is essentially equated with the performance of technical procedures during placements, leaving the development of critical thinking and management skills in the background. The active involvement of students in group work is welcomed, but the effectiveness of this method suffers from inconsistent supervision, revealing an educational transition that remains incomplete among some teachers.

## **Theme 3: Difficulties encountered and available resources.**

**Sub-themes:** Major obstacles, availability of teaching resources and perception of the credit/assessment system.

The difficulties are expressed as follows: *“We’re piling up assessments and internship reports; everything comes at once”*; *“The library is small; the books date from the 1990s”*; *“There’s no Wi-Fi at ISTM. We use our own data, which is expensive”*; *“We accumulate points, but we don’t know how they’re calculated”*.

The pressure associated with the accumulation of exams and practical assignments creates a feeling of overload, described by some as a ‘facade of semesterisation’. Material obstacles are predominant, notably the obsolescence of documentary resources and the lack of an institutional digital infrastructure, forcing students to fund their own research. Whilst the flexibility of the semester system is appreciated, the method of calculating credits remains opaque, and assessment methods are still perceived as purely traditional rather than competence-based.

## **Theme 4: Overall satisfaction and career prospects.**

**Sub-theme 4:** Level of satisfaction, preparation for employment, recognition of the degree and post-graduate plans.

Opinions are mixed: *“This isn’t the LMD system; it’s just the old system in disguise”*; *“Frequent placements and practical sessions make us more operational”*; *“Some senior staff at the ISTM say that the ISTM’s LMD system isn’t reliable”*; *“I want to do a Master’s degree to become a trainer”*.

The overall level of satisfaction is moderate, reflecting a gap between the theoretical promises of the reform and the realities experienced on the ground. The increased number of clinical placements reinforces the sense of practical preparedness, but there remains a strong concern regarding the credibility of the academic qualification among employers. The desire to pursue postgraduate study is clear, reflecting a wish for specialisation that local training provision is not yet able to meet. Finally, expectations centre on the modernisation of digital tools and the standardisation of educational support.

## **4. Discussion**

The thematic analysis of data collected from students at ISTM Mbandaka highlights the complex dynamics of implementing the BSc-MSc-PhD system in a provincial context.

### **4.1. Adoption of the LMD system: a formal but incomplete transition**

The study reveals a highly uneven grasp of the pillars of the LMD system. Whilst the majority of students recognise the division of the academic calendar into semesters, the deeper interconnection between the cycles and teaching units eludes most of them. Lecturers remain the primary source of information due to a lack of institutional communication.

This finding of a fragmented understanding corroborates the work of Ntumba and Kabongo (2023), who observed at the University of Kinshasa that students often reduce the LMD to a simple reorganisation of the academic calendar, without grasping its pedagogical purpose. This lack of prior information is also highlighted by Bakala (2024), who argues that discovering the system at the time of enrolment leads to late and fragile adoption, undermining the learner’s engagement with their academic journey.

We believe that this ‘temporal’ rather than ‘pedagogical’ understanding reflects a lack of psycho-pedagogical preparation. As long as students view the LMD merely as a

new timetable, the profound transformation of their role as learners cannot take place.

#### **4.2. Perception of the Competence-Based Approach (CBA): between technique and confusion**

The organisation of courses is perceived as more rigorous, but the concept of the Competence-Based Approach (CBA) remains unclear to almost all participants. Learning is essentially reduced to the acquisition of technical skills during placements, overshadowing clinical and decision-making abilities.

This reduction of competence to mere technicality aligns with the analyses of Diabaté and Kouamé (2024), who note that in several universities in Francophone Africa, the SCA is often reduced to a slogan due to a lack of genuine implementation. Furthermore, Mbeki and Nzengue (2023) confirm that the heterogeneity of the teaching staff is a major obstacle, with some lecturers replicating the transmissive patterns of the old system due to a lack of adequate training.

We feel it is imperative to emphasise that APC at ISTM Mbandaka remains at the level of an “isolated technical skill”. The failure to develop critical and managerial thinking among future nurses poses a risk to the quality of future care, which demands more than just mastery of dressing protocols.

#### **4.3. Material difficulties and workload: the limitations of ‘fictitious semesterisation’**

Students report a heavy workload where all assessments are concentrated into a short period, creating the impression of a “superficial semester system”. Added to this are outdated materials and the lack of institutional Wi-Fi, forcing students to fund their own research.

Luboya (2023) has extensively documented this “digital divide” which hinders the LMD reforms in the DRC, asserting that without free access to online resources, the student autonomy advocated by the system is an illusion. For their part, Ndombe and Wembo (2025) denounce the “assessment pathologies” where the concentration of exams at the end of the semester betrays the spirit of continuous assessment, an essential driver of success in the new curriculum.

We consider that the financial and material barriers imposed on students create a two-tier system. The LMD reform, intended to be a driver of excellence, risks becoming a factor of exclusion for the most disadvantaged learners, due to a lack of public investment in digital infrastructure.

#### **4.4. Satisfaction and employability: confidence in need of reassurance**

Satisfaction levels are moderate, reflecting the gap between the promises of the reform and the reality on the ground. Whilst clinical immersion offers reassurance regarding practical skills, concerns about the recognition of the degree by employers remain high. Demand for postgraduate (Master’s) programmes is strong to compensate for the limited local provision.

The work of Kambayi and Mutombo (2023) highlights that recruiters now expect a portfolio of skills rather than an academic qualification, which justifies the fears of students at ISTM Mbandaka. Finally, Congo (2024) points out that the lack of Master’s programmes in the provinces encourages a brain drain to the capital, a phenomenon confirmed by our findings through the overwhelming desire for specialisation expressed by the participants.

The students’ aspiration to pursue a Master’s degree is a sign of resilience and ambition. However, without rigorous quality assurance and transparent communication with the labour market, this qualification risks being perceived as a ‘second-tier’ qualification, despite the efforts made by learners to adapt to this new model.

#### **Summary of the discussion**

A cross-sectional analysis of the data highlights the implementation of the BSc-MSc-PhD system at ISTM Mbandaka, which, whilst effective from an administrative standpoint, remains superficial in its pedagogical dimension. The transition to the new curriculum is mainly perceived by students as a restructuring of time and the academic calendar, whilst the very essence of the reform—the competence-based approach—remains largely overshadowed by a purely technical and routine view of nursing. This transition is complicated by a precarious learning environment, marked by a deep digital divide and cognitive overload linked to an excessive concentration of assessments. Whilst the students’ willingness to pursue a specialisation pathway via the Master’s degree demonstrates a certain resilience, the uncertainty regarding the real value of their academic qualification in the job market highlights the urgent need for harmonisation of teaching practices and increased investment in research infrastructure.

## General conclusion

This phenomenological research conducted at ISTM-Mbandaka reveals a paradox of commitment among learners, who perceive the LMD reform as an opportunity for modernisation and international mobility, whilst feeling educational insecurity due to the precarious state of the infrastructure.

The thematic analysis highlights that students' engagement with the system remains largely superficial, often limited to an understanding of the semester system, whilst the Competence-Based Approach (CBA) remains largely unknown or reduced to a technical dimension. Furthermore, students' autonomy is hampered by a digital divide characterised by the lack of institutional Wi-Fi and energy instability, forcing them to fund their own personal research at considerable cost. This context generates increased academic stress, where the concentration of exams is experienced as a 'fictitious semesterisation' hindering the acquisition of clinical skills, despite a resilience demonstrated by a strong desire to continue onto a Master's degree.

In conclusion, the success of this transition will depend on the capacity of the state and the institution to invest in digital environments, modernise documentary resources and standardise teacher training in primary care.

The strategic recommendations emphasise the strengthening of technical facilities and specific infrastructure funding for inland provinces, whilst future prospects suggest local accreditation of doctoral programmes and the development of partnerships to secure graduates' entry into the workforce

## References

- Albarello, L. (2021). *Learning to Research: The Social Actor and Scientific Research* (5th ed.). De Boeck Supérieur.
- Bakala, J. (2024). *The implementation of the BSc-MSc-PhD system in universities in eastern DRC: challenges and adaptation strategies* [PhD thesis, University of Kisangani].
- Beaud, S., & Weber, F. (2022). *Guide to field research: Producing and analysing ethnographic data* (5th ed.). La Découverte.
- Berthier, N. (2022). *Research Techniques in the Social Sciences: Methods and Related Exercises* (6th ed.). Armand Colin.
- Blanchet, A., & Gotman, A. (2022). *Research and its methods: The interview* (2nd ed.). Nathan.
- Boutin, G. (2021). *The Qualitative Research Interview: Theory and Practice* (3rd ed.). Presses de l'Université du Québec.
- Congo, D. (2024). Nursing education in the DRC: current status and prospects. *Journal of Nursing Sciences in Central Africa*, 5(3), 145–162.
- Creswell, J. W., & Poth, C. N. (2022). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (4th ed.). Sage Publications.
- Dépelteau, F. (2020). *The humanities research process* (3rd ed.). Laval University Press.
- Deslauriers, J.-P., & Kérisit, M. (2021). *Ethics in qualitative research*. Presses de l'Université du Québec.
- Diabaté, K., & Kouamé, A. (2024). The competency-based approach in Francophone Africa: between discourse and classroom reality. *Revue Internationale d'Éducation de Sèvres*, 89, 70–85.
- Dumez, H. (2021). *Qualitative research methodology: Research questions, fieldwork, data analysis and writing* (3rd ed.). Vuibert.
- Fortin, M.-F., & Gagnon, J. (2022). *Foundations and stages of the research process: Quantitative and qualitative methods* (5th ed.). Chenelière Éducation.
- Foucher, C., & De La Ville, V.-I. (2023). *Qualitative research methods*. Dunod.
- Giorgi, A. (2021). *The Phenomenological Method in Psychology and the Humanities*. Presses de l'Université de Montréal.
- Grawitz, M. (2022). *Social Science Methods* (12th ed.). Dalloz.
- Hennion, A., & Vidal-Naquet, P. (2023). *Research Ethics in Practice*. EHESS Press.
- Kambayi, F., & Mutombo, J. (2023). Recruiters and LMD graduates in Kinshasa: expectations and realities. *Revue Congolaise d'Économie et de Gestion*, 10(1), 125–140.

- Karsenti, T., & Savoie-Zajc, L. (2023). *Educational research: Stages and approaches* (5th ed.). Presses de l'Université de Montréal.
- Lavallée, M. (2022). *The development of research tools in the humanities*. Éditions Logiques.
- Lejeune, C. (2023). *Qualitative Analysis: Methods and Tools for the Social Sciences*. De Boeck Supérieur.
- Luboya, O. (2023). The Digital Divide and the Bachelor's Degree Programme in the Democratic Republic of the Congo. *African Journal of Educational Technologies*, 6(2), 200–220.
- Mazières, B., & Enlart, S. (2022). *Research Ethics in Education and Training*. L'Harmattan.
- Mbeki, T., & Nzengue, J. (2023). Assessment in the Bachelor's-Master's-Doctorate system in Central Africa: between regulations and practice. *Journal of Comparative Education*, 18(2), 145–168.
- Milo, G. P. (2022). *Digitalisation of higher education in the DRC: Current situation and prospects in the provinces*. Kinshasa: Presses Universitaires du Congo.
- Ministry of Higher and University Education. (2021). *Regulatory and administrative framework of the BSc-MSc-PhD system in the Democratic Republic of the Congo*. Kinshasa: ESU Publications.
- Ministry of Higher and University Education. (2021). *Guidelines on the roll-out of the BSc-MSc-PhD system in the Democratic Republic of the Congo*. Minister's Office.
- Ministry of Higher and University Education. (2021). *Student guide to the BSc-MSc-PhD system: Towards a new culture of learning*. Kinshasa: ESU Publications.
- Ministry of Higher and University Education. (2021). *Handbook on the LMD reform in the Democratic Republic of the Congo*. Kinshasa: ESU Publications.
- Mputu, J.-P. (2022). *The LMD reform in the DRC: Challenges and prospects for medical institutions*. Kinshasa: Éditions Universitaires Africaines.
- Mucchielli, A. (2021). *Qualitative analysis in the humanities and social sciences*. Armand Colin.
- Mukendi, J. R. (2023). *Learner autonomy in the face of digital precariousness: The case of higher education institutions in Équateur*. *Congolese Journal of Pedagogy and Health*, 8(1), 112–128.
- Ndombe, A., & Wembo, É. (2025). Assessment issues in the LMD semester system in Mbuji-Mayi. *Annals of the University of Mbuji-Mayi*, 5(1), 105–122.
- Negura, L. (2023). Content analysis in the study of social representations. *Journal of Social Psychology*, 12(1), 45–62.
- Ntumba, B., & Kabongo, A. (2023). Students' perceptions of the LMD system at the University of Kinshasa. *Congolese Journal of University Pedagogy*, 14(1), 100–125.
- Nzau, M. (2023). *Sociology of education in a post-colonial context: The case of the transition to the LMD system in the provinces of the DRC*. *Congolese Journal of Social Sciences*, 12(2), 45–60.
- Paille, P., & Mucchielli, A. (2021). *Qualitative analysis in the humanities and social sciences* (5th ed.). Armand Colin.
- Quivy, R., & Van Campenhoudt, L. (2022). *Handbook of Social Science Research* (6th ed.). Dunod.
- Sari, D., & Olivieri, D. (2021). *The ethics of field research: A practical guide*. L'Harmattan.
- Tshilombo, L., & Kabeya, M. (2021). *The LMD Reform and the Quality of Medical Training in Rural and Semi-Urban Areas*. Lubumbashi: Éditions Savoir Africain.
- Wanlin, P. (2022). Content analysis as a method of qualitative interview analysis: From technique to interpretation. *Qualitative Research*, 41(2), 12–35.
- World Health Organization. (2022). *Global strategy on human resources for health: Workforce 2030*. Geneva: WHO Press.