

Editorial

Scientific research as an integrating and dynamic axis of substantive processes in Angolan higher education institutions

A investigação científica como eixo integrador e dinamizador dos processos substantivos nas instituições de ensino superior angolanas

THE scientific research is, today more than ever, the heart that drives university life. In Angolan Higher Education Institutions (HEIs), this observation assumes one strategic relevance. To observing the challenges and potential of our educational context, it becomes evident that research it's not just a dimension isolated, but the element capable of dynamically integrating the pillars of teaching, extension, innovation and the institutional management.

The Ministry of Higher Education, Science, Technology and Innovation (MESCTI, 2020) has reiterated the need to

consolidate a higher education system that is based in the production of useful, ethical knowledge committed to national development. In this line, universities do not should not only train competent professionals, but also critical citizens and researchers committed to building more just and resilient societies. Scientific research, anchored in reality of Angolan HEIs, constitutes the connecting axis between the teaching-learning processes, training continuous, management university and extension community. In this sense, it is important to highlight its main attributes:

- **Research as a pedagogical method and basis of training university student**

Teaching based in the research represents a paradigm shift in traditional pedagogical models. When students are challenged to investigate, question, experiment and formulate hypotheses, not just memorize contents: they build meaning, develop higher cognitive skills and connect with the real problems of society. Learning thus becomes an active, meaningful and transformative process.

The use of research as a pedagogical tool allows the student to become an active subject of his/her formative process. By investigating, one ceases to be a mere receiver of content and begins to construct knowledge based on reality that surrounds him. This didactic-methodological change

favors the development of critical thinking, creativity and the spirit of problem-solving.

The teacher, in this context, ceases to be a mere transmitter of knowledge and begins to act as an intellectual mentor, scientific advisor, and mediator of complex learning. His performance must be supported by a reflective practice, fueled by ongoing updating and scientific production. This therefore requires strengthening a culture of inquiry among teachers as a condition for academic excellence and pedagogical innovation.

In recent years, we have witnessed inspiring experiences in several Angolan HEIs, in which integrative research projects were incorporated into the curriculum. In them, students are invited to investigate social and environmental phenomena or cultural aspects of their communities, producing knowledge at the same time as they develop technical and human skills. Teaching, when linked to scientific production, becomes more relevant, motivating, and connected to the challenges real of society.

- **Research as an essential pillar of postgraduate studies and development professional**

From the perspective of training throughout life, scientific research assumes one function structuring in development personal and professional development of

citizens, becoming the essential pillar of postgraduate studies. Specializations, master's degrees and doctorates must be based on rigorous and applied research methodologies, allowing professionals move forward in the consolidation of its technical, ethical and analytical skills.

UNICEF (2022) highlights the importance of research in the African context as a tool to strengthen education systems and generate interventions more effective, especially in vulnerable areas. In an aligned manner, the National Staff Training Plan (PNFQ) points out, with reason for the urgency of forming a critical mass of professional researchers. This priority no it says respect only to academia, but to all of Angolan society, which needs sustainable solutions to challenges such as public health, youth unemployment, economic diversification and food security.

Postgraduate courses must be intrinsically linked to the production of knowledge new, useful and applicable. It is through research that professionals can rethink practices, propose improvements and actively contribute to solving complex problems faced by the country. Therefore, investing in training research - based postgraduate studies are a direct investment in sustainability, sovereignty and national self-determination. To promote one postgraduate study based on applied research, we give an important

step towards the country's intellectual and technological autonomy.

- **Research as a premise of extension university and social innovation**

The extension university, understood as the constant dialogue between academia and the community, gains depth and effectiveness when supported by research. Based on participatory diagnostics, analyses contextual and impact assessment, it is possible to develop extension projects that respond concretely to the needs local, foster active citizenship and promote transformations real.

The university that researches with a social sense is also the one that most closely connects with communities. The connection between research and outreach allows scientific knowledge to be translated into concrete actions in the territories, strengthening the social commitment of higher education.

Projects such as community clinics, observatories territorial, technology workshops social and environmental education programs are some examples in which research contributes directly to the empowerment of populations and social innovation. As UNESCO (2022) proposes, 21st- century universities must be "civic," or that is, committed to human rights, cultural diversity and sustainability planetary. In Angola, this commitment involves listening to communities, valuing

traditional knowledge and building bridges between science and citizenship, promoting interculturality and the appreciation of heritage intangible of the peoples. Thus, the university ceases to be a island of knowledge and becomes a catalytic agent of territorial development, expanding its legitimacy and public recognition.

- **The decisive role of science in the management university student**

The investigation also he has an unavoidable role in the improvement of institutional management. The management of HEIs must be based on solid evidence, derived from systematic processes of self-assessment, data analysis, indicator monitoring, and impact studies. Processes such as strategic planning, quality monitoring, and decision-making need to be supported by reliable data and scientific studies.

Based on internal investigations, the institutions they can to understand better yours challenges - such as evasion, low academic performance or teacher turnover - and draw strategies more effective in dealing with them. This management model based on evidence is recommended by international organizations and has been adopted by leading universities on the African continent. In Angola, initiatives such as observatories institutional and self-assessment reports they are steps promising in this direction.

Management practices Data-driven approaches foster organizational innovation and resource optimization, which is particularly important in a context of constraints budgetary constraints and the need to maximize results with limited resources. Such an approach contributes to the construction of a culture of quality, transparency and institutional responsibility. Thus, science ceases to be a end in itself and begins to guide the functioning university daily life.

CHALLENGES OF SCIENCE IN ANGOLAN HEIs, PATHS FOR THE FUTURE

In this time of profound transformations, in which Angola seeks new pathways to inclusive and sustainable growth, scientific research emerges as a strategic priority. More than a academic function, it is a attitude before the world: the attitude of those who ask, listen, analyze and propose.

Angolan higher education institutions are called to lead this new cycle. And they will only do so with success if they put science at the center of their pedagogical, curricular, institutional and social practices. May this editorial be a call to action, reflection and commitment with one university more alive, more just and more transformative.

For the investigation flourish as a practice structuring, it is imperative that each HEI adopts a coherent, feasible and aligned

institutional scientific policy with the legal frameworks national. The National Strategy for Science, Technology and Innovation of Angola (2021-2030), promoted by MESCTI, establishes clear objectives: improve research infrastructures, create and consolidate multidisciplinary research centers, enhance human resources and foster interinstitutional cooperation.

Promoting a solid research culture requires , above all , institutional will and consistent policies. Each HEI must build its scientific policy based on three pillars: materials, human incentives and strategic alignment with national and local development plans.

In the in practice, this means investing in up-to-date libraries, laboratories, access to databases, and digital platforms. But it also means valuing researchers, offering research time, funding, and academic recognition. Speaking of science, sustainable in HEIs, it is necessary promote the creation of concrete mechanisms, such as:

- Specific funding lines for internal scientific projects;
- research ethics regulations;
- Training programs for young researchers;
- Incentives for publication in indexed journals;
- Promotion of a culture of scientific evaluation and dissemination.

To carry out these actions, the existence of suitable conditions must be ensured. basic materials. It is equally essential to promote permanent forums for scientific discussion. These spaces not only strengthen collaborative networks, as they increase the visibility of science produced in Angola.

It is necessary to create mechanisms that encourage the creation of interdisciplinary research groups and centers, with strong vocation to solve concrete problems of the country. These centers can and should dialogue with the productive sector, with the administrations municipal authorities and civil society, placing academic knowledge at the service of good common.

Even though progress be visible, there are significant challenges to overcome. The shortage of full-time PhD researchers, the fragility of scientific cooperation networks, the low international visibility of publications national and the limited culture of research funding are real obstacles. Overcoming them requires one joint effort. The State must continue to invest in staff training and institutional strengthening. Higher education institutions need assume science as the axis of its mission. And civil society must recognize and support the role of research in the country's development.

Face these challenges requires one coordinated action between the State, HEIs, the productive sector and partners

international. As authors such as Altbach, Reisberg and Rumbley (2009) argue, internationalization, interinstitutional cooperation and financing sustainable they are conditions indispensable for universities in the Global South to participate, in a fair and sovereign manner, in global knowledge production.

Scientific research must be recognized as the unifying and dynamic element of substantive processes in Higher Education Institutions in Angola. It strengthens teaching, qualifies extension, improves management, and generates social impact. Therefore, it represents not only a function among others, but the essence of the mission university.

The consolidation of a robust, ethical research culture committed to the good common is a collective responsibility. Requires political will, continuous investment, appreciation of researchers, institutional support and societal engagement. As UNESCO stated in its report "Reimagining our futures together: a new social contract for education" (2021), "higher education and science must walk together to shape more just, peaceful and sustainable futures. "At this historic moment, when Angola is projecting itself towards a new cycle of development, science and research no they are luxuries or peripheral activities. They are, in fact, the foundation on which it will be built one

nation more prosperous, resilient and inclusive.

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