Cross-Curricular Approaches and the Development of Core Skills among First-Year University Students in Mozambique

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Abstract

This study analyzes the relevance of cross-curricular approaches in developing core competencies among first-year university students in Maputo, Mozambique. The research, conducted between August and November 2024, involved a sample of 250 students from both public and private higher education institutions using a structured questionnaire. The findings reveal a widespread concern among students regarding the insufficient acquisition of essential academic and professional skills, even after completing the second semester. Evidence suggests that existing curricular models predominantly favor disciplinary compartmentalization, often at the expense of holistic and integrative learning. Statistical analysis demonstrates significant correlations between the presence of cross-curricular elements and the self-reported development of competencies such as critical thinking, problem-solving, and effective communication. The results highlight that the systematic incorporation of transversal dimensions within curricula substantially enhances the integrated development of core skills, thereby preparing students for contemporary academic and professional challenges. The study concludes by recommending a deliberate redesign of curricular structures to include cross-curricularity as a central pillar of undergraduate education reform in Mozambique.

Keywords: cross-curricular approaches, core skills, higher education, Mozambique, curriculum design.

1. INTRODUCTION

The increasing complexity of labor markets and societal demands has pressured higher education institutions to reconsider their pedagogical models, particularly concerning the development of core competencies among students in their first year of study. According to De Barros Torres and Almeida (2021), the first year of university represents a critical period of transition; students who enter higher education with limited academic readiness often face greater difficulties adapting to its intellectual and social demands. As these authors emphasize, the university context requires not only cognitive preparedness but also social and emotional adaptability that supports persistence and success in academic life.

In the Mozambican context, Mandlate (2020) observes that, while national education policies underscore the importance of aligning higher education with the country's development needs, the translation of these guidelines into institutional practices remains fragmented. Across universities, varying levels of commitment to curricular quality and innovation reveal an inconsistent implementation of reform principles, which may contribute to disparities in student outcomes.

Laita (2014) further argues that meaningful educational reform requires systemic coherence. Changes within one subsystem must be accompanied by corresponding transformations across others, as educational structures are interdependent. Failure to ensure such coherence risks reducing reforms to superficial exercises, unable to produce sustainable improvement.

The central problem that motivated this investigation lies in the apparent discrepancy between the basic competencies developed by first-year university students in Maputo and those required for academic and professional success. Many students, even after completing the second semester, express uncertainty regarding their foundational abilities, suggesting that current curricula may not be adequately supporting their development.

Accordingly, the general objective of this study is to examine the importance of implementing cross-curricular approaches during the first year of higher education as a means of enhancing students' acquisition of core skills. Specifically, the research seeks to:

1. Identify the key core competencies that first-year students perceive as insufficiently developed within current curricular structures;

2. Analyze the relationship between the presence of cross-curricular elements and students' perceived development of basic competencies;

3. Propose practical guidelines for effectively integrating cross-curricular approaches into first-year higher education programs in Mozambique.

The relevance of this study rests on three primary dimensions. From an academic standpoint, it contributes to the body of knowledge on curricular structuring in Mozambican higher education, a topic still underexplored in scholarly literature. Institutionally, it provides empirical insights that can inform curriculum redesign efforts aimed at producing more coherent and integrated undergraduate programs. Finally, from a societal perspective, the study offers potential contributions to the improvement of educational quality in Mozambique, with implications for national human capital development and the formation of a competent, adaptable workforce.

2. LITERATURE REVIEW

This section addresses the conceptualization of cross-curricular approaches, highlighting their multiple interpretations and applications within educational contexts. It also discusses the importance of basic competencies in higher education, which are essential for the comprehensive development of students and the acquisition of transferable skills. Furthermore, it explores the relationship between curricular transversality and skills development, emphasizing how integrative practices can foster more contextualized and meaningful learning. Finally, international experiences of cross-curricular implementation are presented, offering examples of best practices and challenges encountered in various educational settings worldwide.

2.1. Conceptualizing Cross-Curricular Approaches

The concept of cross-curricular or transversal approaches has gained increasing prominence in educational reform debates, particularly in higher education. According to Annala, Lindén, and Mäkinen (2016), cross-curricular refers to the deliberate integration of knowledge, skills, and values that transcend disciplinary boundaries, promoting meaningful connections among diverse fields of study. This integration encourages learners to perceive knowledge as an interconnected whole rather than as isolated fragments of information.

Laita (2014) expands this definition within the framework of the Bologna Process, emphasizing that its educational paradigm is fundamentally student-centered and grounded in the acquisition of both specific and transversal competencies. Such a paradigm promotes active and participatory learning methodologies, fostering environments conducive to developing professional expertise alongside general, transferable skills that enable graduates to adapt to new realities and perform competently in diverse contexts.

In the specific context of Mozambican higher education, cross-curricular may be understood as a deliberate pedagogical strategy to counteract the tendency toward premature specialization, thereby encouraging a more holistic understanding of knowledge and phenomena. Nevertheless, as Laita (2014) highlights, university curricula remain largely organized along disciplinary lines, which inevitably leads to knowledge fragmentation and compartmentalized learning.

From a curriculum design perspective, this traditional organization, based on isolated subjects, can hinder the integration of knowledge and impede the development of a comprehensive understanding of complex issues. Moreover, as curriculum designers recognize, the mere inclusion of "transversal topics" within syllabi does not guarantee meaningful learning. True cross-curricular demands an epistemological and pedagogical transformation, a shift from rhetoric to practice, requiring substantial changes in how teaching, assessment, and academic organization are conceived and enacted. As Barnett and Coate (2005) argue, curriculum reform must reconsider not only *what* is taught, but also *how* and *for what purpose*.

In Mozambique, where structural challenges such as limited resources, high teaching loads, and institutional rigidity persist, the authentic implementation of cross-curricular education demands sustained investment in faculty development, the creation of interdisciplinary working spaces, and the revision of regulatory frameworks that perpetuate fragmented educational logics.

Importantly, cross-curricular does not oppose disciplinary knowledge but rather seeks its critical integration through intentional and pedagogically sound articulation among areas of study. The role of curriculum design, in this sense, is to create learning ecosystems that promote dialogue across disciplines, collective knowledge construction, and the development of competencies grounded in students' social, economic, and cultural realities. Thus, cross-curricular education transcends a purely methodological option to represent a

political-pedagogical stance aimed at forming critical citizens capable of systemic thinking and responsible action in an interconnected world. The curriculum, therefore, should evolve from being a set of isolated components into a network of meanings, where knowledge is constructed through interrelation rather than separation.

2.2. CoreCompetencies in Higher Education

Contemporary research has sought to identify and systematize the essential competencies required for university students to succeed in academic and professional environments. Donaciano and Almeida (2011) developed the *Scale of Learning Competencies and Strategies in Higher Education (ECEA-Sup)*, which assesses Mozambican university students' competencies across three main dimensions:

1. Cognitive dimension – encompassing comprehension and problem-solving skills;
2. Behavioral dimension – relating to time management, study organization, and academic habits;
3. Motivational dimension – referring to the students' internal drive to engage and persist in academic work.

This model can be extended to four broader domains: cognitive (critical thinking, problem-solving), communicative (oral and written expression), social-relational (teamwork, adaptability), and technical-methodological (digital literacy, research skills).

Suleman (2017, cited in Laranjeiro, Suleman, & Botelho, 2020) identified six key competencies that enjoy consensus in the literature: communication, teamwork, analytical and critical thinking, learning ability, information technology, and planning and organizational skills. Laita (2014) contends that, in Mozambique, Bologna-inspired educational models promote the integration of transversal competencies, active learning methodologies, and learning situated across multiple contexts, all of which align with the principles of *connective thinking* and *transferable learning*.

It is also essential to note that the development of core competencies during the first year of university should be culturally grounded, reflecting the linguistic and socioeconomic contexts in which learning occurs. Competency-based education must therefore acknowledge students' diverse backgrounds and promote inclusion and equity in academic success.

2.3. The Relationship between Cross-Curricular and Competency Development

The positive relationship between cross-curricular approaches and the development of basic competencies has been well-documented in international studies. Paraskeva (2014), through his *Itinerant Curriculum Theory (ICT)*, proposes a dynamic and context-sensitive understanding of curriculum, emphasizing the integration of multiple epistemologies and the adaptation of educational practice to cultural, historical, and political realities. This

theory challenges standardized curriculum models and advocates for an education that values diversity and social justice.

Paraskeva's (2014) framework is particularly relevant in peripheral and structurally challenged educational contexts such as Mozambique, where curricular reforms often encounter systemic and institutional barriers. His theory provides an epistemological foundation for resisting homogenizing curricular models, advocating instead for locally grounded curriculum design that responds to the lived realities of learners.

Similarly, Mandlate (2020) warns that the *National System for Evaluation, Accreditation, and Quality Assurance in Higher Education (SINAQES)* risks becoming a bureaucratic mechanism serving elites and commercial interests rather than advancing educational equity. Without genuine and integrated implementation, curriculum reforms may inadvertently reinforce social inequalities instead of reducing them.

The convergence between the perspectives of Mandlate (2020) and Paraskeva (2014) underscores that curricular reform can yield meaningful transformation only when it integrates epistemological cross-curricular with critical contextualization. Without systemic integration and ethical commitment, the disjunction between higher education and societal needs will persist. Curriculum, therefore, must transcend fragmented and colonial structures, fostering spaces for critical reflection, creativity, and transformative learning.

3. METHODOLOGY

This research adopted a descriptive-correlational design with a mixed-methods approach (quantitative and qualitative). This methodological choice allowed not only the quantification and description of patterns related to students' basic competencies and curricular approaches but also for an in-depth understanding of their perceptions and experiences.

The study was conducted in Maputo, Mozambique, across both public and private higher education institutions. Data collection took place between August and November 2024, coinciding with the end of the academic year, an appropriate moment to evaluate students' perceptions of the competencies developed during their first university year.

The target population comprised first-year undergraduate students enrolled in various programs. The sample consisted of 250 students, equally distributed between public and private institutions, selected through quota sampling to ensure representativeness across academic fields and institutional types.

The main instrument was a structured questionnaire divided into three sections:

1. Sociodemographic and academic characteristics (7 items);
2. Perceived Development of Core Competencies Scale (24 items, 5-point Likert scale);
3. Cross-Curricular Elements Identification Scale (18 items, 5-point Likert scale).

Additionally, semi-structured interviews were conducted with 25 students (10% of the sample), randomly selected from the survey participants, to deepen understanding of their experiences and perceptions regarding cross-curricular practices.

After obtaining informed consent, questionnaires were administered both in person and online (via Google Forms). Interviews were recorded with participants' authorization and conducted in confidential settings to ensure openness and authenticity of responses.

Quantitative data were analyzed using SPSS version 28.0, applying descriptive statistics (frequencies, means, and standard deviations) and inferential tests (Pearson's correlations, factor analysis, and multiple regression).Qualitative data from interviews were analyzed through thematic content analysis using NVivo version 14.0, enabling the identification of emerging patterns and cross-case insights.

The study complied with all ethical research principles, including informed consent, data confidentiality, and participant anonymity. Institutions interested in the research outcomes received summary reports of the findings.

4. ANALYSIS AND DISCUSSION OF THE RESULTS

The study sample comprised 250 first-year university students in Maputo, equally distributed between public (50%) and private (50%) institutions. In terms of gender, there was a slight predominance of female participants (54%) over male (46%). Participants' ages ranged from 18 to 32 years, with a mean of 20.7 years (SD = 2.8). Table 1 presents the distribution of participants by field of study.

Table 1: Distribution of participants by field of study

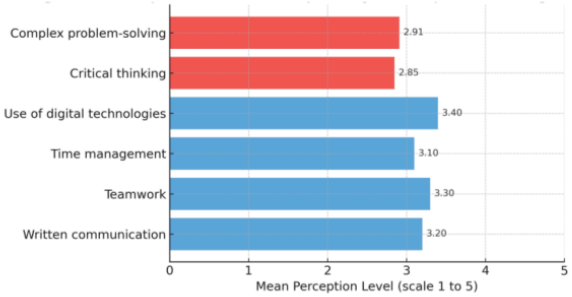
Field of Study	Frequency	Percentage (%)
Social and Human Sciences	75	30.0
Exact and Natural Sciences	48	19.2
Engineering and Technology	62	24.8
Health Sciences	35	14.0
Agricultural Sciences	17	6.8
Arts and Design	13	5.2
Total	**250**	**100**

Source: Authors (2024)

4.1. Perceptions of Core Competency Development

The analysis of students' self-reported perceptions regarding the development of their basic competencies during the first year of university revealed a concerning pattern. Figure 1 displays the average perception scores for the six main categories of competencies assessed.

Figure 1: Average perception of basic competency development (scale from 1 to 5)



Source: Authors (2024)

As can be observed, all competency categories recorded mean scores below 3.5 on a five-point scale, indicating a moderate perception of development. Particularly alarming are the scores for critical thinking (M = 2.85; SD = 0.73) and complex problem-solving (M = 2.91; SD = 0.81), both considered foundational for academic success. These findings underscore the need for targeted attention.

Qualitative evidence from interviews reinforced this pattern.A Civil Engineering student stated:

"I've learned many isolated theoretical concepts, but I struggle to connect them when solving real problems in my field." *(Interviewee 7)*

Similarly, a Sociology student noted:

"We are at the end of the year, and I still feel insecure about writing an academic paper or analyzing a scientific text critically." *(Interviewee 15)*

These testimonies reveal not only gaps in skill development but also a growing student awareness of curricular fragmentation.Indeed, 72% of respondents expressed a sense that "something is missing" in their basic preparation, signaling structural weaknesses in curricular design rather than mere adjustment difficulties.

This perception aligns with Campira, Bulaque, and Almeida (2021), who found that low levels of student satisfaction and engagement in Mozambican universities correlate strongly with intentions to change programs and reduced classroom participation. Such findings suggest that dissatisfaction is not a temporary adaptation issue but an indicator of deeper curricular limitations.

Consequently, the results point to a systemic challenge: the inability of current curricular strategies to provide integrated, meaningful, and motivating learning experiences. Instead of fostering key competencies such as critical thinking, academic literacy, and problem-

solving, many programs operate as disconnected academic itineraries, misaligned with students' realities and labor market demands.

This data must therefore be interpreted not merely as indicators of temporary dissatisfaction but as warning signs urging the curricular reconfiguration through more transversal, contextually relevant, and student-centered approaches.

4.2. Cross-Curricular Elements in Current Curricula

The analysis of cross-curricular elements within current curricular structures revealed a predominance of compartmentalized approaches. Table 2 Frequency of Perceived Cross-Curricular Indicators (N = 250).

Table 2: Frequency of Perceived Cross-Curricular Indicators (N = 250)

Indicator of Transversality	Never (%)	Rarely (%)	Sometimes (%)	Frequently (%)	Always (%)
Integrative projects across disciplines	34.8	38.4	18.0	7.2	1.6
Addressing the same topic from different disciplinary perspectives	25.2	42.0	22.4	8.8	1.6
Assessments integrating knowledge from multiple disciplines	40.0	36.8	15.2	6.4	1.6
Instructors explicitly referencing other disciplines	21.6	41.2	24.8	9.6	2.8
Activities promoting transfer of learning across contexts	29.2	38.0	23.2	8.0	1.6

Source: Authors (2024)

Most students reported rare or nonexistent cross-curricular experiences, confirming the persistence of fragmented teaching practices.This aligns with Assane and Nascimento (2022), who attribute such fragmentation in Mozambican higher education to limited pedagogical training for university instructors, hindering effective interdisciplinary teaching.

Qualitative interviews deepened this diagnosis. A recurring theme in students' narratives was the perception of "disciplinary silos" with minimal interconnection. As one Economics student stated:

"Each professor seems to teach as if their subject is the only one that matters, without linking it to what we learn elsewhere." *(Interviewee 3)*

This perception echoes Morin's (2000) critique of the compartmentalization of knowledge. According to Morin, such fragmentation prevents the development of "general intelligence," the ability to perceive connections and complexities across systems. In an age of multidimensional challenges, the absence of curricular integration restricts the

cultivation of essential competencies such as critical thinking, problem-solving, and the capacity to synthesize diverse forms of knowledge.

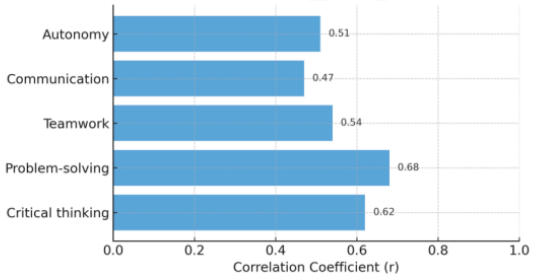
Moreover, the lack of teacher preparation for cross-curricular pedagogy highlights the need for faculty development policies. True curricular integration requires not only coherent design but also pedagogical competence to implement it effectively. This involves epistemological literacy, collaboration among faculty, and institutional support for interdisciplinary initiatives.

Thus, the data does not merely reveal curricular gaps, they call for a paradigm shift in university teaching practice and institutional organization, grounded in collaboration, reflection, and the intentional promotion of transversal learning.Strengthening cross-curricular approaches necessitates institutional commitment to integration, supported by training policies, collaborative pedagogical models, and instructional structures that enable connections across fields of knowledge.

4.3. Relationship Between Cross-Curricular and Competency Development

The correlational analysis between indicators of curricular transversality and students' perceptions of basic competency development revealed statistically significant associations, as illustrated in Figure 2.

Figure 2: Correlations between cross-curricular indicators and perceived development of basic competencies



Source: Authors (2024)

A moderate to strong positive correlation was observed (r ranging from 0.47 to 0.68; $p < 0.001$) between the perceived presence of cross-curricular elements and students' self-reported development of basic competencies. This association was particularly robust in relation to competencies such as critical thinking ($r = 0.62$) and problem-solving ($r = 0.68$).

Multiple regression analysis showed that the five curricular transversality indicators collectively explained approximately 48% of the variance in perceived competency development ($R^2 = 0.483$; $p < 0.001$), which constitutes a substantial effect.

The strength of these correlations, particularly regarding critical thinking and problem-solving, may be interpreted considering Beane's (1997) contributions, who argues that curricular integration fosters an organic articulation of knowledge, bringing learning closer to students' lived experiences and thereby enabling the development of more critical and functional understandings. This perspective is echoed by Morin (2000), who calls for the overcoming of compartmentalized knowledge structures through an education oriented toward complexity and disciplinary interconnection.

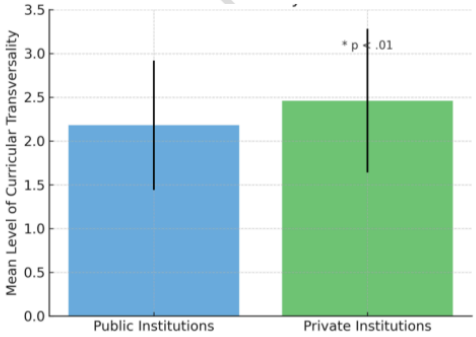
Nevertheless, despite the significance of these findings, further investigation is required to understand the institutional dynamics that either facilitate or hinder the effective implementation of transversal curricular practices. In this regard, the comparative analysis between public and private institutions, discussed in the following section, may reveal differentiated patterns in the adoption and effectiveness of such approaches, highlighting the role of institutional policies, faculty training, and available resources.

It is also important to acknowledge the limitations of self-reported data, which, while valuable for capturing students' perceptions and experiences, may be influenced by subjective factors. Therefore, future research should consider combining quantitative and qualitative methods, such as classroom observation and in-depth interviews with faculty, to achieve a more comprehensive and validated understanding of the effects of curricular transversality.

4.4. Differences Between Public and Private Institutions

The comparative analysis between public and private institutions revealed a differentiated landscape, as shown in Figure 3.

Figure 3: Comparison of curricular transversality indicators between public and private institutions



Source: Authors (2024)

Findings indicate that private institutions exhibit, on average, slightly higher levels of implementation of cross-curricular practices (M = 2.46; SD = 0.82) compared to public institutions (M = 2.18; SD = 0.74). The difference is statistically significant ($t(248) = 2.79$; $p < .01$), suggesting a measurable disparity in the degree to which transversal approaches are embedded across institutional types.

This disparity may be interpreted considering the observations made by Almeida et al. (2022), who emphasize that public higher education institutions often face budgetary constraints, internal bureaucracy, and greater rigidity in modifying curricular plans. These structural obstacles hinder the agile adoption of innovative and cross-curricular practices that require pedagogical reorganization, investment in faculty training, and increased curricular flexibility.

Conversely, private institutions, operating under more flexible and market-oriented logic, tend to adopt student-centered pedagogical approaches more readily. The same study by Almeida et al. (2022) notes that private institutions are often more receptive to the introduction of active methodologies, project-based learning, and interdisciplinary work, all of which support curricular transversality.

However, it is crucial to stress that a higher degree of implementation does not necessarily translate to greater depth or effectiveness. As emphasized by Beane (1997) and Morin (2000), curricular transversality is not limited to the occasional integration of common themes across subjects. Rather, it entails a holistic curricular conception in which knowledge is mobilized in contextualized, critical, and meaningful ways. Without this foundational vision, there is a risk of implementing transversality in a superficial manner—devoid of pedagogical intentionality and formative coherence.

Moreover, the student-centered learning paradigm, as highlighted by Almeida et al. (2022), requires enabling conditions that are not always present—even in private institutions. These include a faculty with updated pedagogical training, mechanisms for reflective assessment, and institutional structures that promote interdepartmental and interdisciplinary collaboration.

Accordingly, the observed differences between public and private institutions should not be interpreted as a value judgment, but rather as a reflection of differing institutional conditions that shape the capacity for curricular innovation.

From a curricular design perspective, these results underscore the importance of institutional adaptability in promoting transversality. While both systems share the same educational goals, private institutions appear better positioned to translate policy intentions into concrete pedagogical actions. Strengthening collaboration and knowledge transfer between sectors could therefore serve as a catalyst for more equitable and coherent curricular reform across Mozambique's higher education landscape.

4.5. Priority Areas for Intervention

An integrated analysis of both quantitative and qualitative data enabled the identification of four priority areas for curricular intervention aimed at strengthening transversality and, consequently, enhancing the development of basic competencies:

1. Integrated Academic Literacy:A significant majority (84%) of students expressed the need for greater support in developing academic writing, research, and information management skills—integrated within disciplinary content. As Lea and Street (2006) assert, challenges related to academic literacy extend beyond the acquisition of technical skills and involve understanding the epistemological conventions, modes of thinking, and discursive practices specific to each discipline. In this sense, a cross-curricular approach to literacy—embedded within the curriculum—is more effective than isolated remedial models.

2. Contextualized Critical Thinking:About 79% of respondents desired more opportunities to engage in critical analysis applied to real-world and context-specific problems. This finding is consistent with the research of Almeida et al. (2022), who underscore critical thinking as a key 21st-century competency and advocate for pedagogical approaches that promote questioning, reasoned debate, and complex problem-solving. For critical thinking to be effective, it must be cultivated in authentic contexts, through tasks that challenge students to mobilize diverse knowledge and formulate well-grounded judgments.

3. Collaborative Problem Solving:Approximately 76% of students highlighted the need for integrative projects that encourage teamwork and the multidisciplinary handling of complex challenges. Johnson, Johnson, and Smith (2014) demonstrate that cooperative learning environments not only enhance content acquisition but also foster socioemotional and metacognitive competencies that are critical to academic and professional success. This approach is particularly effective in higher education settings that value interdisciplinarity and knowledge complexity.

4. Applied Digital Literacy:About 72% of respondents emphasized the importance of developing technological skills in alignment with the specific content of their academic disciplines. According to Christine (2017), digital literacy should be treated as a transversal competency, cutting across disciplines and enhancing active, participatory, and autonomous learning.

These four areas reflect not only perceived gaps but also concrete opportunities for curricular innovation. Their identification reinforces the need to abandon fragmented pedagogical models in favor of a systemic and transversal approach that recognizes competencies as integral elements of the educational trajectory. The convergence between empirical findings and the trends described by scholars such as Lea and Street, Johnson et al., and Christine confirms the validity of the results presented and points to viable pathways for curriculum redesign.

More than addressing existing deficits, interventions in these areas represent a strategic opportunity to align higher education with the contemporary challenges of knowledge, work, and citizenship. This alignment between perceived needs and scientific evidence offers a compelling rationale for the formulation of educational and institutional policies that prioritize transversality and the holistic development of students.

5. FINAL CONSIDERATIONS

This study aimed to analyze the significance of cross-curricular approaches during the first year of higher education in developing basic competencies among university students in Maputo, Mozambique. The results obtained support robust and potentially impactful conclusions for educational policy and pedagogical practice in Mozambican higher education.

First, the findings reveal a widespread perception among students that their basic competencies, particularly critical thinking, complex problem-solving, and academic literacy, are not being adequately developed during their first year of university. This formative gap is especially concerning given that these competencies constitute fundamental pillars for academic progression and future professional integration.

Second, the data demonstrates the prevalence of compartmentalized curricular models, marked by limited disciplinary integration and few opportunities for students to establish meaningful connections across areas of knowledge. This curricular fragmentation appears to be a key explanatory factor for the perceived deficiencies in basic competency development.

A central finding of this study is the statistically significant correlation between the presence of curricular transversality elements and the self-perceived development of basic competencies. This strong association suggests that the systematic implementation of pedagogical practices that promote knowledge integration can serve as an effective strategy for strengthening foundational student training during the first year of higher education.

Equally relevant is the identification of four priority areas for curricular intervention: integrated academic literacy, contextualized critical thinking, collaborative problem-solving, and applied digital literacy. These domains offer concrete and strategic guidance for reformulating curricula with a view to fostering transversality and promoting more effective competency development.

The observed differences between public and private institutions in the implementation of transversal practices underscore the importance of considering structural and contextual factors in the planning of curricular reforms. Educational policies aimed at promoting curricular transversality should include targeted support for institutions facing greater structural constraints.

Based on the findings, the following recommendations are proposed:

1. Comprehensive curriculum review of first-year programs in Mozambican higher education, explicitly incorporating transversal elements to support integrated basic skills development;

2. Faculty development programs focused on integrative pedagogies and cross-curricular approaches;

3. Institutional support structures for the implementation and monitoring of transversal practices;

4. Competency assessment systems to evaluate the development of basic skills throughout the first academic year and enable timely interventions;

5. Longitudinal research on the medium- and long-term impacts of cross-curricular approaches on students' academic and professional success.

In summary, this study provides solid empirical evidence for the critical role of cross-curricular approaches in fostering the development of basic competencies among first-year university students in Maputo. The findings have significant implications for educational research, pedagogical practice, and institutional policy, contributing to a well-founded reconfiguration of existing curricular models in Mozambican higher education.

While the study's limitations, namely its focus on a single city and its cross-sectional design, warrant cautious generalization, they also point to future research directions. Further studies should explore other regions of Mozambique and adopt longitudinal designs to better capture the temporal evolution of competency development.

Nonetheless, the results presented herein offer valuable insights for informing curriculum transformation efforts that strengthen the foundational training of Mozambican university students, thereby better equipping them to meet academic and professional challenges ahead.

References

Almeida, L. D. S., Gonçalves, S., Rebola, F., Soares, S., & Vieira, F. (2022). Inovação pedagógica no ensino superior: Cenários e caminhos de transformação.

Annala, J., Lindén, J. & Mäkinen, M. (2016) Curriculum in higher education research. In J. Case & J. Huisman (Eds.) Researching Higher Education. International perspectives on theory, policy and practice. SHRE Society for Research into Higher Education & Routledge, 171–189. doi:10.4324/9781315675404.

Assane, A. I., & Nascimento, M. I. D. (2022). Formação de professores para docência universitária nas instituições de ensino superior em Moçambique: entre as orientações legais e as práticas cotidianas. *RevistaPráxisEducacional*, *18*(49).

Barnett, R., & Coate, K. (2005). Engaging the Curriculum in Higher Education. *Berkshire: Open University Press*.

Beane, J. A. (1997). *Curriculum integration: Designing the core of democratic education*. Teachers College Press.

Campira, F. P., Bulaque, P. Z., & Almeida, L. S. (2021). Satisfação com experiências acadêmicas: variáveis preditoras em estudantes universitários de Moçambique. *Revista Ibero-Americana de Estudos em Educação*, 1979-1994.

Christine, R. (2017). *Europeanframework for the digital competenceofeducators*. Joint Research Centre.

de Barros Torres, A. A. G., & Almeida, L. S. (2021). Adaptação acadêmica de estudantes do 1º ano: promovendo o sucesso e a permanência na Universidade. *Revista Internacional de Educação Superior*, *7*, e021024-e021024.

Donaciano, B., & Almeida, L. S. (2011). Competências de estudo e Rendimento Académico de alunos da Universidade Pedagógica de Moçambique.

Johnson, D. W., Johnson, R. T., & Smith, K. A. (2014). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal on excellence in college teaching*, *25*(3&4).

Laita, M. dos S. V. (2014). *Implicações do Processo de Bolonha na Organização dos Planos Curriculares e nas Práticas Pedagógicas na Universidade Católica de Moçambique*. Tese de Doutoramento em Ciências da Educação. Universidade Católica Portuguesa.

Laranjeiro, A. C., Suleman, F., & Botelho, M. D. C. (2020). A empregabilidade dos graduados: competências procuradas nos anúncios de emprego. *Sociologia, problemas e práticas*, (93), 49-69.

Lea, M. R., & Street, B. V. (2006). The" academic literacies" model: Theory and applications. *Theoryintopractice*, *45*(4), 368-377.

Mandlate, E. V. (2020). Políticas de qualidade nos quadros curriculares das instituições do ensino superior em moçambique. *Revista Científica da Universidade Eduardo Mondlane, série: Ciências da Educação*. Disponível em https://biblioteca.unisced.edu.mz/bitstream/123456789/3303/1/109-Texto%20do%20Artigo-419-1-10-20201118%20Mandlate.pdf. Acessada aos 20 de setembro de 2024.

Morin, E. (2000). *Saberes globais e saberes locais: o olhar transdisciplinar* . Editora Garamond.

Paraskeva, J. M. (2024). *Itinerant Curriculum Theory: A Declaration of Epistemological Independence*. Bloomsbury Academic.

NOTE: As English is not my first language, I relied on professional AI-assisted translation tools to ensure that the article meets the linguistic and stylistic standards of international scientific journals. All conceptual, methodological, and analytical content was developed entirely by the authors.

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