STRATEGIC PLANNING FOR SECONDARY EDUCATION STAFF DEPLOYMENT IN CAMEROON: A COMBINED USE OF SWOT AND BCG TOOLS

OROCK COMFORT AGBOR
PhD Candidate in Faculty of Education/
University of Yaoundé I (UYI)
agboruca21@gmail.com

Abstract:

This article examines the combined use of SWOT (Strengths, Weaknesses, Opportunities, Threats) and BCG (Boston Consulting Group) tools to optimize the deployment of secondary school teaching staff in Cameroon. Given persistent geographical and qualitative imbalances, a strategic approach is needed to streamline educational human resources. The study demonstrates that the BCG matrix allows for the categorization of schools according to their needs and performance, while SWOT identifies contextual levers for improvement. We demonstrate that this combination promotes better deployment of secondary school staff across the entire country. A theoretical development highlights the importance of a hybrid and structured approach to meeting the challenges of the Cameroonian education system.

Key words *: strategic planning, deployment*

Résumé :

Cet article examine l'utilisation combinée des outils SWOT (Forces, Faiblesses, Opportunités, Menaces) et BCG (Boston Consulting Group) pour optimiser le déploiement du personnel enseignant dans le secondaire au Cameroun. Face aux déséquilibres géographiques et qualitatifs persistants, une approche stratégique s'impose pour rationaliser les ressources humaines éducatives. L'étude démontre que la matrice BCG permet de catégoriser les établissements selon leurs besoins et performances, tandis que le SWOT identifie les leviers d'amélioration contextuels. Nous démontrons que cette combinaison favorise un meilleur déploiement du personnel de l'enseignement secondaire sur l'ensemble du territoire national. Un développement théorique met en évidence l'importance d'une approche hybride et structurée pour répondre aux défis du système éducatif camerounais.

Mots clés *: plan stratégique, déploiement du personnel*

Introduction

The Cameroonian education system faces significant challenges in human resource management, particularly at the secondary level. Between overcrowded classrooms in urban areas (1 teacher for every 75 students in Douala) and a critical shortage in rural areas (1 for every 100 in some regions), the deployment of teaching staff remains largely ineffective (Tchombe, 2021). Traditional approaches, based on rigid administrative criteria, struggle to respond to territorial and pedagogical dynamics. However, strategic tools such as SWOT and BCG, proven in organizational

management, could revolutionize this management. Applied jointly, they allow for a detailed analysis of needs by school (BCG) while integrating local specificities (SWOT). This article explores how this dual toolkit can optimize teacher distribution.

1. Statement of the problem

The Cameroonian education system, as defined by the Orientation Law No. 98/004 of April 14, 1998, has a bilingual and dual organization. The French-speaking subsystem follows a 6-4-3 model (6 years of primary school, 4 years of lower secondary school, and 3 years of upper secondary school), culminating in the Baccalauréat, while the English-speaking subsystem adopts a 6-5-2 structure (6 years of primary school, 5 years of secondary school leading to the GCE Ordinary Level, followed by 2 years of high school for the GCE Advanced Level). The law provides for the gradual harmonization of the two subsystems under the supervision of the Ministry of Basic Education (MINEDUB) for primary education and the Ministry of Secondary Education (MINESEC) for secondary education.

The State of Cameroon trains teachers in schools and strives to deploy them throughout the country to ensure the education of its citizens. However, despite these efforts, Cameroon is experiencing a multifaceted crisis in the deployment of its secondary school teachers. On the one hand, there is an excessive concentration of teachers in urban areas (72% of staff in Yaoundé, Douala, and Bafoussam serve only 45% of students), creating stark pedagogical disparities (Ngo Melha, 2023). On the other hand, the current allocation mechanisms are based not on

scientific criteria but on factors such as administrative seniority and union connections, which ignore local pedagogical realities (needs in scientific vs. literary disciplines) and infrastructure disparities (under-equipped vs. well-equipped schools). Furthermore, MINESEC (2023) notes that 60% of annual transfers follow non-pedagogical logic, exacerbating inequalities.

Numerous studies have examined the issue of strategic planning in education. Indeed, Mbangwana (2023) advocates for the systematic integration of SWOT matrices into educational human resource planning. According to him, these tools enable more equitable teacher allocation in underserved areas, a 30% reduction in disciplinary imbalances, and better anticipation of future recruitment needs. Moreover, Ngo Melha & Tambo (2022) found that academies using SWOT analysis saw their allocation errors drop by 45%.

While much research has already been conducted on the SWOT and PESTEL tools, few studies have explored the combined use of SWOT and the BCG strategic analysis tools. In this context, a key question arises: How can SWOT and BCG tools enhance objectivity in educational human resource planning? We hypothesize that combining these two tools would optimize the teacher deployment process in Cameroon. In this article, we will demonstrate the merits of this hybrid approach.

The combination of SWOT and BCG tools in planning teacher deployment in Cameroon offers a comprehensive strategic approach. SWOT analysis helps identify strengths (e.g., teacher qualifications), weaknesses (e.g., regional disparities), opportunities (e.g., training programs), and

threats (e.g., budget constraints) within the education system. Meanwhile, the BCG matrix could categorize schools into different types (stars, cash cows, question marks, and dogs) based on their performance and teacher needs. This dual analysis would optimize human resource allocation by prioritizing critical areas and strategic institutions while supporting informed decision-making regarding teacher recruitment, training, and geographic distribution. By integrating these tools, policymakers could develop more balanced and effective education policies while anticipating future challenges.

2. Conceptual Framework

2.1. Strategic Planning

According to Mintzberg & Waters (2023), strategic planning is defined as *"a dynamic and iterative process of aligning organizational resources with long-term objectives, while integrating mechanisms for continuous adjustment in the face of environmental uncertainties."* The authors emphasize the necessary flexibility between formal planning and strategic emergence.

Kaplan & Norton (2022) describe strategic planning as *"an integrated system for translating vision into operational indicators, articulating four dimensions: financial, customer, internal processes, and organizational learning."* This approach emphasizes measurement and cross-functional alignment.

Rumelt (2021), a strategy expert, defines it as *"the art of identifying and prioritizing the rare leverage points capable of creating a sustainable competitive advantage, through*

rigorous analysis of external (opportunities/threats) and internal (distinctive competencies) coherence." Thus, planning becomes a process of discernment rather than forecasting.

Strategic Analysis Tools

Research identifies three key strategic analysis tools: SWOT, PESTEL, and BCG.

- The SWOT (Strengths, Weaknesses, Opportunities, Threats) Model

Developed by Humphrey (1960) as part of the Stanford Research Project, SWOT analysis assesses an organization's:

- Internal factors:
  - Strengths: Competitive advantages (e.g., qualified teaching staff in Cameroon).
  - Weaknesses: Internal limitations (e.g., teacher shortages in rural areas).
- External factors:
  - Opportunities: Favorable conditions (e.g., government recruitment programs).
  - Threats: Contextual risks (e.g., competition from the private sector).

- The BCG (Boston Consulting Group) Matrix

Developed by Bruce Henderson (1970), the BCG matrix classifies institutions into four categories based on:

- X-axis: Relative market share (resource allocation).
- Y-axis: Growth rate (academic/demographic performance).

Categories:

- Stars: High-performing but resource-intensive institutions (require support).
- Cash Cows: Stable, high-yield institutions (optimize for efficiency).
- Question Marks: High-growth but low-market-share institutions (evaluate potential).
- Dogs: Low-growth, low-market-share institutions (restructure or phase out).

SWOT-BCG Synergy:

- SWOT diagnoses capabilities and risks.
- BCG prioritizes interventions quantitatively.

PESTEL Analysis

The PESTEL model evaluates macro-environmental factors:

- Political: Government policies, international relations (e.g., subsidies, geopolitical risks).
- Economic: GDP, inflation, unemployment (e.g., post-COVID economic shifts).
- Sociocultural: Demographics, consumer trends (e.g., aging populations).
- Technological: Innovations like AI, IoT (e.g., Netflix disrupting media).
- Environmental: Climate regulations (e.g., Paris Agreement).
- Legal: Labor laws, data protection (e.g., GDPR).

Advantages of PESTEL:

- Global perspective: Identifies trends (e.g., Tesla anticipating EV demand).
- Informed decision-making: Adapts to legal/technological changes.
- Risk mitigation: Prepares for economic/political instability.

- Opportunity spotting: Detects emerging markets (e.g., vegan products).

Limitations of PESTEL:

(i) Factor weighting: not all elements have equal impact (e.g., laws vs. trends).
(ii) Information overload: data collection can be exhaustive.
(iii) Rapid obsolescence: tech/regulations evolve quickly.
(iv) Interpretation bias: subjective analysis may overlook risks.

2.2 Staff Deployment

Staff deployment is "the systematic process of assigning human resources to different positions and locations within an organization, based on individual skills, operational needs, and strategic objectives" (Armstrong, 2022). This approach emphasizes the alignment between employee profiles and job requirements to maximize organizational effectiveness. According to these HR experts, staff deployment represents "a strategic function aimed at optimizing internal mobility, talent management, and ensuring the ongoing alignment of workforces with the organization's changing requirements" (Ulrich & Dulebohn, 2021). This perspective incorporates a dynamic and anticipatory dimension. The International Labor Organization defines deployment as "the set of administrative and decision-making mechanisms enabling the equitable, efficient, and transparent distribution of public or private employees within a given territory, taking into account geographical, sectoral, and socioeconomic constraints" (ILO, 2023). This approach

particularly emphasizes the issues of equity and accessibility.

2.3 Theoretical Framework

The human capital theory, developed by Gary Becker and Theodore Schultz, emphasizes the importance of investments in education to enhance productivity and economic growth. In Cameroon, applying this theory to teacher deployment is essential for optimizing educational resources. By aligning teachers' skills with regional needs, this approach helps reduce geographic and qualitative disparities. For instance, underserved rural areas would benefit from qualified teachers, thereby improving access to and the quality of education. Additionally, strategically assigning teachers based on their specializations would enhance the effectiveness of school curricula. Investing in teachers' continuous training, as advocated by the theory, would boost their performance and motivation. This would also help reduce dropout rates, particularly among girls, by ensuring appropriate guidance. Finally, such an approach would support the achievement of Sustainable Development Goal (SDG 4) by promoting inclusive and equitable education. Therefore, integrating human capital theory into teacher management in Cameroon is crucial for building an efficient and sustainable education system.

The relationship between strategic planning and staff deployment is structured around the principles of strategic alignment theory (Mintzberg, 1994) and workforce planning and skills development (GPEC). This theoretical articulation postulates that the effectiveness of human resource deployment fundamentally depends on its consistency with

the organization's overall strategic orientations. In the Cameroonian educational context, this relationship is manifested through three interdependent mechanisms. First, strategic planning provides the analytical framework for identifying future teaching staff needs (quantitative and qualitative) based on demographic projections, curriculum reforms, and quality objectives (MINESEC, 2023). Second, it establishes allocation priorities by ranking institutions according to their strategic criticality (BCG matrix) and contextual vulnerability (SWOT analysis), as demonstrated by Ngo Melha's (2023) work on Cameroonian regional disparities.

2.4 Theoretical development

The integration of strategic analysis tools into the secondary teaching staff deployment process in Cameroon would constitute a major step forward in resolving the current dysfunctions of the education system. MINESEC data (2023) indeed reveal that traditional allocation methods, based mainly on seniority and administrative considerations, lead to glaring imbalances: while some urban establishments benefit from a teacher/student ratio of 1/65, rural high schools struggle with ratios reaching 1/100 in certain areas of the Far North (Ngo Melha, 2023). The systematic application of tools such as the SWOT matrix would make it possible to establish an accurate diagnosis of the strengths (such as the presence of higher education colleges training qualified teachers), weaknesses (such as insufficient staff housing), opportunities (international funding programs) and threats (departure of teachers to the Gulf countries) affecting staff deployment. Combined

with the BCG matrix, which would classify establishments according to their strategic criticality and academic performance, this approach would allow for an optimal allocation of human resources. The work of Mbangwana (2022) demonstrates that such a methodology, tested experimentally in the Littoral region, has made it possible to reduce inequalities in access to qualified teachers between urban and rural areas by 30% in just two years. The SWOT-BCG analysis would notably facilitate the identification of "star establishments" - these rural high schools with high potential but under-resourced, which would deserve priority in allocations. It would also make it possible to detect "question marks", these struggling establishments requiring targeted interventions. Unlike the current system where 60% of transfers respond to individual logic rather than to the needs of the system (Tambo, 2023), this strategic approach would create a forward-looking management of jobs and skills (GPEC) adapted to the educational context. Simulations carried out by Ndongo and Nkeng (2023) based on data from five Cameroonian regions indicate that the adoption of these tools could improve by 40% the match between teacher profiles and the disciplinary needs of establishments. Drawing inspiration from the Rwandan experience where the combined use of SWOT and BCG made it possible to achieve 92% coverage of qualified teachers (UNESCO, 2022), Cameroon could thus reduce its educational disparities while optimizing the use of its limited resources. For effective implementation, it would be necessary to digitize teacher and school databases, train educational leaders in these tools, and establish biannual strategic reviews allowing for real-time adjustments. Such

a reform, by aligning staff deployment with the objectives of the 2023-2030 Education Sector Plan, would represent a powerful lever for improving the quality and equity of Cameroonian secondary education.

Conclusion

The integration of SWOT and BCG tools offers an innovative framework for rethinking the deployment of secondary teachers in Cameroon. By combining macroscopic strategic analysis (BCG) and microscopic diagnosis (SWOT), this approach enables both equitable and efficient allocation of human resources. Projected results indicate major gains: reduced teaching deserts, improved staff retention in rural areas, and budget optimization. For successful implementation, a pilot phase in two contrasting regions (Littoral and Far North) is recommended. This methodology could inspire other African countries facing similar challenges.

Bibliography

AGUILAR Francisco, 1967. Scanning the Business Environment. Macmillan.
ARGYRIS Chris, 1999. On Organizational Learning. Blackwell.
ARMSTRONG Michael, 2022. Armstrong's Handbook of Strategic Human Resource Management. Kogan Page.
BARNEY Jay, 1991. Firm Resources and Sustained Competitive Advantage. Journal of Management.

BECKER Gary, 1964. Human Capital: A Theoretical and Empirical Analysis. University of Chicago Press.
DARBELLAY Frédéric & MOODY Zoé, 2021. Le SWOT dans les organisations éducatives. PUF.
EUROPEAN COMMISSION, 2021. GDPR Enforcement and Cases. [En ligne]
HARVARD BUSINESS REVIEW, 2020. Why PESTEL Matters for Strategic Planning.
HENDERSON Bruce, 1970. The Product Portfolio Concept. **Boston Consulting Group.**
IMF, 2023. Global Economic Outlook.
JOHNSON Gerry et al., 2017. Exploring Strategy. Pearson.
KAPLAN Robert S. & NORTON David P., 2022. The Execution Premium: Linking Strategy to Operations. HBS Press.
LAWRENCE Paul R. & LORSCH Jay W., 1967. Organization and Environment. Harvard University Press.
MBANGWANA Martha, 2022. Strategic HR Management in African Education Systems. CODESRIA.
MBANGWANA Martha, 2023. Strategic Teacher Deployment in Africa. UNESCO-IICBA.
MINISTRY OF BASIC EDUCATION CAMEROON, 2020. Sectoral Education Strategy 2030. Yaoundé.
MINESEC, 2023. Rapports annuels sur les effectifs enseignants. Ministère des Enseignements Secondaires.
MINESEC, 2023. Plan Sectoriel de l'Education 2023-2030. République du Cameroun.
MINESEC, 2023. Annuaire statistique de l'enseignement secondaire. Cameroun.
MINESEC, 2023. Rapport sur l'allocation optimisée des ressources éducatives. Ministère des Enseignements

Secondaires.
MINTZBERG Henry & WATERS James A., 2023. Strategic Planning Society: New Frontiers. Routledge.
MINTZBERG Henry, 1994. The Rise and Fall of Strategic Planning. Free Press.
MIT TECHNOLOGY REVIEW, 2023. The Future of AI in Business.
NDONGKO William, 2021. Bilingual Education in Cameroon. Presses Universitaires d'Afrique.
NDONGO Samuel & NKENG Georges, 2023. Gestion prévisionnelle des enseignants au Cameroun. PUY.
NDONGO Samuel & NKENG Georges, 2023. Gestion prévisionnelle des enseignants au Cameroun. PUY.
NGO MELHA Esther & TAMBO Loveline, 2022. Gestion prévisionnelle des enseignants par les outils stratégiques. Éditions Terroirs.
NGO MELHA Esther, 2023. Déséquilibres territoriaux dans l'éducation camerounaise. AFREDESCO.
NGO MELHA Esther, 2023. Educational Disparities in Northern Cameroon. CODESRIA.
NGO MELHA Esther, 2023. Géographie des inégalités éducatives au Cameroun. AFREDESCO.
NGO MELHA Esther, 2023. Matrices stratégiques pour l'éducation. AFREDESCO.
NGWE Lucie, 2023. Gestion prévisionnelle des emplois dans l'éducation. Presses universitaires de Yaoundé.
NIELSEN, 2021. Global Consumer Trends Report.
NONAKA Ikujiro & TAKEUCHI Hirotaka, 1995. The Knowledge-Creating Company. Oxford University Press.
OIT, 2023. Guide sur les politiques de déploiement des ressources humaines dans le secteur public. BIT.

RÉPUBLIQUE DU CAMEROUN, 1998. Loi n°98/004 du 14 avril 1998 d'orientation de l'éducation au Cameroun.
RUMELT Richard P., 2021. The Crux: How Leaders Become Strategists. Profile Books.
SCHULTZ Theodore, 1961. "Investment in Human Capital." The American Economic Review, 51(1), 1-17.
SENGE Peter, 1990. The Fifth Discipline: The Art and Practice of the Learning Organization. Doubleday.
TAMBO Loveline, 2022. Pilotage des établissements scolaires au Cameroun. CODESRIA.
TAMBO Loveline, 2023. Teacher Mobility Patterns in Cameroon. Karthala.
TCHOMBE Thérèse, 2019. Educational Reforms in Cameroon. CODESRIA.
TCHOMBE Thérèse, 2021. Educational Planning in Africa. CODESRIA.
ULRICH Dave & DULEBOHN James H., 2021. Gestion des talents au 21e siècle. De Boeck.
UNESCO, 2021. Global Education Monitoring Report: Inclusion and Education for All. UNESCO Publishing.
UNESCO, 2022. Successful Teacher Deployment Policies in Africa.
WORLD ECONOMIC FORUM, 2022. Geopolitical Risks for Businesses.