

Outcome-Based Curriculum Adoption in Higher Education Institutions in Sierra Leone: Potentials, Obstacles and Sustainable Solutions

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Abstract

This study explores at the adoption of Outcome-Based Curricula in Sierra Leone's Higher Education Institutions (HEIs). Furthermore, stressed by the study are the opportunities, difficulties, and long-run solutions related with an outcome-based curriculum. Additionally, the study emphasizes the flaws of the traditional Lecturer-centered curriculum model, which was the dominant teaching technique in Sierra Leone HEIs before the Strategic Planning of Higher Education Institutions Reforms (SPHEIR) initiative's involvement from 2018 to 2021. Out-dated curricula, instructors as the primary source of knowledge, low graduate employment rates in the labour market, a disconnect between graduates' academic programmes and students' learning outcomes, and lack in essential competency skills like critical thinking and problem-solving distinguish the traditional approach of education. Higher education institutions were compelled to make a major change from the conventional input-based curriculum to the learner-centered, outcome-based curriculum, which highlights what students need to know and be able to do upon finishing a course or degree programme. The outcome-based curriculum also aims to reach particular, quantifiable results that link academic courses at Higher Education Institutions (HEIs) to national development objectives or priorities. Curriculum should be developed by institutions to assess students' learning and help them track their progress in the expected acquisition of knowledge and abilities. The study further recommends long-run viability of the Outcome-Based Curriculum in higher education institutions in Sierra Leone.

Keywords: Adoption, Potentials, Obstacles, Sustainable solution, Higher Education Institutions, Outcome-Based Curriculum.

INTRODUCTION

Background to the Study

The advancement of any nation depends on the foundation knowledge gained by its citizens. It improves people's quality of life and encourages creativity. Particularly in addressing world issues like poverty, inequality, and climate change. Higher education is vital for a country to meet its national objectives or priorities as well as to equip people with the skills they need to create long-term solutions to challenges including critical thinking and problem-solving. UNESCO (2021) notes that since it fosters knowledge, innovation, and responsible citizenship, higher education is a potent tool for improving people and society. Worldwide, there is growing acceptance of the need for equal and inclusive access to higher education. Access to higher education continues to be challenging in many developing countries, especially Sierra Leone. While urban elites mostly have access to higher education, rural areas, women, and under-served communities are sometimes over looked, Trow (2006) argues. Notwithstanding the obstacles, there remain

several routes for growth and change, including the use of creative approaches like Outcome-Based Education, which aims to link academic programmes at the tertiary level with national development goals like the promotion of renewable energy, poverty reduction, and improved access to high-quality education. According to Teferra and Altbach (2004), higher education institutions have the possibility to become drivers of national development if all of the objectives for that development are met.

Basis of higher education is the six years of primary school, three junior secondary school years, three senior secondary school years, and four university years that make up the educational system of Sierra Leone. It is vital to generate graduates with the great interpersonal abilities needed for national growth. One must complete the first three phases (6-3-3) of the 6-3-3-4 system in Sierra Leone in order to enrol in higher education. Six years make up the primary school. The children take the National Primary School Exam at the conclusion of this phase. Should they pass, they go for three years to junior secondary school. Pupils sit for the Basic Education Certificate Exam at the conclusion of this level; if they pass, they move on to three years of senior secondary school before taking the West African Senior School Certificate Examination. Higher educational institutions in Sierra Leone prefer applicants with five credits, including English Language. The state and private universities make up Sierra Leone's higher education system. These include:

State Universities

a. University of Sierra Leone:

This is made up of:

i. Fourah Bay College(FBC) ii. College of Medicine and Allied Health Sciences (COHMAS) ii. Institute for Public Administration and Management (IPAM)

b. Njala University(NU), which has sites in Bo and Njala these sites are referred to campuses

c. Ernest Bai Koroma University of Science and Technology(EBKUST), which has locations in Makeni and Port Loko

d. The Milton Margai Technical University(MTU), which has campuses in Goderich and Congo Cross.

e. Kono University of Science and Technology(KUST)

Private Universities

a. University of Makeni(UNIMAK)

b. Limkowing University of Creative Technologies

c. Blue Crest

d. Atlantic African Oriental Multicultural University

e University of Management and Technology.UNIMTECH

Technical and Vocational Schools

i. Polytechnics- a) Freetown Polytechnic

While the Tertiary Education Commissions regulate quality assurance procedures and grant institutions accreditation to operate, the Ministry of Technical and Higher Education manages the activities of the nation's higher education institutions. The NCTVA supervises examinations and certifications for Technical and Vocational institutions

Problem Statement

The higher education institutions of Sierra Leone play a vital role in shaping the future of the country by providing students with the knowledge, skills, and ideals needed for both personal advancement and national development. The introduction of Outcome-Based Curriculum in higher education institutions in Sierra Leone presents a remarkable opportunity to enhance the educational experience and better prepares graduates for the demands of society. Under OBC's focus on student-centered learning, it aims to equip its graduates with the knowledge and abilities necessary for success in both personal and professional spheres.

Nevertheless, there are several obstacles on the way to putting this revolutionary curriculum into action. These obstacles also exacerbate inequalities in academic success in addition to limiting the inclusion of OBC. Students could not be prepared for the workforce at the conclusion of their studies. Addressing these obstacles demands, the development of long-lasting solutions that give cooperation front stage and promote an educational environment that genuinely values and supports every student's capacity, hence

guaranteeing more equitable and accessible higher education for all. The goal of this study is to critically explore Outcome-Based Curriculum Adoption in Higher Education Institutions in Sierra Leone in relation to these core themes (potential, obstacles, and sustainable solutions).

Objectives of Study

The study is guided by the following specific objectives. To:

- Determine the possibilities of Outcome-Based Curriculum adoption in higher education institutions in Sierra Leone;
- Highlight the obstacles of Outcome-Based Curriculum adoption in higher education institutions in Sierra Leone;
- Offer practical sustainable solutions for Outcome-Based Curriculum implementation in HEIs

REVIEW OF RELATED LITERATURE

Outcome Based Curriculum and Traditional Teacher Centered Curriculum

According to Omsten and Hunkin (2017), the traditional, teacher-centered curriculum is a topic-centered method whereby the teacher presents predetermined knowledge to the pupils via lectures, reading, and memorization. Mash and Willis (2017) define traditional teacher-centered curriculum as one in which the teacher has almost total power in selecting course content, planning lesson distribution direction, and lecturing, therefore providing little opportunity for students to voice their ideas or make decisions. On the other hand, Kizlik (2012) describes the traditional teacher-centered curriculum as one based on behavioural learning theories in which instruction is highly regulated and pupils are required to show mastery via repetition, examinations, and recollection at the most fundamental level of the cognitive domain. Among the main features of the conventional teacher centered curriculum are: • Its emphasis is on content distribution via the lecture method • It emphasizes content and syllabus coverage • Students are passive listeners. It results in rote memorization. The curriculum is strict; it uses limited technology. Summative evaluation is central focus of assessment.

Existing Gaps of Traditional Teacher Centered Curriculum

Before the Strategic Partnership in Higher Education Institution Reform (SPHEIR) Project in Sierra Leone (2018-2021), there had been gaps between the academic programmes offered in Higher Education Institutions and the demand for the job industry. Most of the graduates from HEIs during the traditional curriculum were not employed due to lack of competency skills required of them in the job market. Many HEIs lacked structured system to train lecturers on designing learning outcomes and competency based curriculum, there was poor curriculum alignment between learning outcomes, teaching strategies and assessment. This affects the effectiveness of the curriculum and also affect graduate competency as confirmed by Biggs and Tang (2011). Assessment challenges were major gaps as confirmed by Obi and Ofoha (2021) who in their study made mention that assessment challenges that designing of and implementing valid and reliable assessment tool that measures learning outcome is a major gap. The issue of non-participation of key stakeholders in the planning, development and implementation of the traditional teacher centered curriculum was another gap. According to (UNESCO, 2020), curriculum reform often proceeds without adequate input from industry stakeholders, employees, alumni and students. The absence of these individuals could result in outcomes that are not aligned with labour market needs, thus affecting the entire process, furthermore, the traditional curriculum design tend to be rigid and disconnected from the socio-economic demands of the country. Content delivery often lacks alignment with national development priorities or labour market expectations, leading to mismatch between graduates skills and employment opportunities (UNESCO, 2015).

Outcome-Based Curriculum

In higher education institutions, outcome-based curricula are instructional paradigm that moves the emphasis of instruction and learning away from the teacher's goals toward the student's anticipated accomplishments at the conclusion of a learning event. The instructional strategies, learning activities, and evaluations are then meticulously aligned to make sure that these particular results are achieved in order to improve the students. According to Killen (2000), the Outcome-Based Curriculum is an approach in which teachers must first determine what students should be able to accomplish and then plan the curriculum, teaching, and evaluation to make sure that these outcomes are met. In contrast, Outcome Based Curriculum is defined by Harden (2007) as a framework that prioritizes alignment between learning outcomes, curriculum structure, instructional strategies, and assessment. According to Tucker (2004), OBC entails changing the curriculum, evaluation methods, and reporting procedures in education to reflect student learning outcomes. OBC is also defined by Biggs and Tang (2011) as a strategy that necessitates a

positive alignment between learning outcomes, teaching techniques, and evaluation methods. According to Malan (2000), OBC is a learner-centered, result-oriented approach that emphasizes what students are expected to learn and be able to learn after completing a program. In Sierra Leone's higher education institutions (HEIs), the adoption of OBC is seen as a means of modernizing university instruction and making sure that graduates have the skills necessary for the workforce and national development. Additionally, UNESCO (2015) supports these reforms, stating that aligning educational systems with learning outcomes helps create people who are equipped to make significant contributions to sustainable development. Lastly, the traditional, teacher-centered methodology is out of sync with international quality standards due to the lack of clearly defined learning outcomes, which results in inconsistencies in graduate traits and academic accomplishments. This misalignment has a detrimental impact on international qualification comparability and quality assurance procedures. (World Bank, 2013)

The major attributes of Outcome-Based Curriculum are:

- It is mostly focused on the pupils
- Students are engaged in their learning
- It places a strong emphasis on teaching
- Provides responsibility and quality assurance
- It promotes international bench marking and globalization.
- The curriculum is adaptable
- Emphasizes fairness and inclusivity
- Encourages ongoing evaluation and feedback
- Facilitates the integration of technology
- It is competency-based
- The learner is evaluated through ongoing evaluation, which is a crucial component of the process.

Paradigm Shift From the Traditional Teacher Centered Curriculum Model to Outcome-Based Curriculum in Higher Education Institutions in Sierra Leone.

In Sierra Leone the Traditional Teacher Centered Curriculum was used in all the Universities and Polytechnics both private and public. Due to the identified gaps like primary focus on content coverage, summative evaluation, limited emphasis on what students are expected to demonstrate after graduation, non-alignment of academic programmes of the faculties and the teaching and assessment procedures of the students, students are with qualifications but it is mismatch to the job market raising concern by the employers, which led to unemployment of graduates in the industries. Due to these inadequacies it led to the shift to QA outcome Based Curriculum.

Potentials of Outcome-Based Curriculum in Higher Education Institutions in Sierra Leone

The adoption of OBC in HEIs in Sierra Leone holds significant promise for transforming the educational landscape. This format prioritizes student learning outcomes, aiming to equip graduates with specific competencies that align closely with industry demands and societal needs. Below are key prospects that highlight the potential benefits of OBC in this context:

a. The Curriculum Aligns with National Development Goals and Aspirations of HEIs

The Sierra Leone government has recognized education as a critical driver for national development (Ministry of Education, 2021). By adopting an OBC, institutions can better align their curricula with national priorities, such as sustainable Development Goals (SDGs). This alignment enhances the relevance of skills taught in universities, ensuring graduates are equipped to contribute to society needs. This is in line with the Medium-Term National Development Plan of 2019-2023 with the focus on human capital development and a workforce with relevant skills for economic growth GOSL (2018).

Through the OBC, graduates with these national development priorities will enhance graduates not only to acquire academic qualification but have the competency for job the market.

Issues of national concerns like youth unemployment, gender-based violence, poverty, health issues through OBC, graduates would have critical thinking and problem solving skills to address these challenges if they occur.

enhances Graduate Employability and Skills Development

Before the adoption of OBC, unemployment amongst graduates was at an alarming rate though these graduates have the requisite qualifications but they lack the competency skill needed by the employers in the job market. The main reason for this gap was due to the fact that the stakeholders' were not involved in the planning, development and implementation of the curriculum in the traditional approach. One of the

most compelling prospects of OBC is its potential to enhance employability. By centering education around skills and competencies required in the job market, graduates are better prepared to meet employers' expectations. Research suggests that education systems focused on outcomes, improves graduates' ability to demonstrate relevant skills which are crucial in a developing economy like Sierra Leone (Barrie,2006). But with the OBC, so many partners were involved the curriculum process like employers, Higher Education Institutions' academic and administrative staff ,the 50-50 group, INSAP, were constantly involved in the planning, development and implementation of the OBC through a project called SPHEIR (2018-2021).

In the Traditional curriculum approach, there was no alignment between academic training and the needs of the job market, but with the adoption of OBC, issue of unemployment of graduates became issue of the past because those students who go through OBC now have the training and skills needed in their specific area of specialization that will enhance their employability. This is confirmed by Yorke (2006) who posit that OBC addresses employability skills such as critical thinking, communication, teamwork and digital literacy into academic programmes.

improves the Introduction of Accountability and Quality Assurance.

The implementation of OBC required the creation of Quality Assurance Directorates and the introduction of Postgraduate Diploma in Quality Assurance in higher education institutions, with UNIMAK serving as the program's cornerstone. The main objective of introducing quality assurance directorates in HEIs was to make sure that the shift to OBC is implemented in accordance with the principles of quality assurance and maintenance. The quality assurance system includes a rigorous adherence to the curriculum template, which covers all aspects of the academic programme's content. The goal is to improve the quality of teaching and learning in HEIs and guarantee institutional responsibility. The Teaching Service Commission was established in Sierra Leone by an Act of Parliament in 2021 to oversee HEIs and ensure that their academic programs adhere to the Curriculum Template for content delivery. HEIs in Sierra Leone are encouraged to adhere to international and regional norms by the quality assurance system. Through the credit transfer and National Qualification Framework. Sierra Leone embraces OBC as a result of its strong assessment approaches for efficiently assessing learning outcomes (Sankoh,2021).

d. Contributes to International Recognition and Competitiveness

Prior to the advent of OBC, Sierra struggled to gain international recognition for its academic offerings and the capacity of its students to pursue postgraduate studies abroad. The courses offered by Sierra Leone's higher education institutions (HEIs) did not meet the criteria of other HEIs before the SPHEIR initiative. There were numerous gaps in the institutional records of graduates who wished to further their education during times of great demand. Some individuals were, to some degree, given courses that they thought the curriculum lacked. As a result of this hardship, they were able to complete their planned curriculum for a longer period of time. This issue was caused by the curriculum's structure at the time. However, the (African Union, 2018) states that these problems have been solved by the use of OBC, a framework that is in line with international educational norms and priorities. As a result, OBC's implementation fosters the international competitiveness of academic programs by means of frameworks that promote student mobility and global recognition, such as the National Qualification Framework in Sierra Leone and the African Continental Qualification Framework. This enables credit transfers, academic recognition, and professional certification through OBC, as supported by (Harden, 2007). This would provide HEI institutions more opportunities for international collaboration, joint degree programs, and participation in the global academic community by preparing students from these schools for the international labour market.

e. Curriculum Innovation and Pedagogical Modifications

The lecture approach is relied upon by students due to large class sizes, a lack of interaction between the student and the teacher, and the fact that the teacher is the only one who presents the material using a methodical approach that promotes student participation rather than just passive listening, all of which are traits of the traditional teacher-centered curriculum.

f. Emphasis of Learning From Rote Memorization to Experiential Learning,

By encouraging students to interact with the material, the lecture, and their classmates, this promotes stronger relationships between students. The instructional approach to delivering material will foster active learning by stimulating students' enthusiasm for the learning process. In support of this, Biggs and Tang (2011) argue that "instead of relying solely on lectures and rote memorization, educators are motivated to adapt interactive, student-centered teaching method such as problem-based learning, simulation and collaborative projects." Because the shift to OBC is resource-intensive, it gives HEIs the chance to improve and build upon institutional innovation and changes.

g. Enhances Stakeholder Engagement

The OBC promotes stakeholder involvement by incorporating the input of important stakeholders into the curriculum development process. The important stakeholders whose contributions support the process in achieving both the goals of higher education institutions and the nation for socioeconomic progress and national development include employers, professional groups, past students, community leaders, and academics (Fitzpatrick & Locke, 2020). By including these essential community stakeholders in the curriculum implementation process, higher education is improved and the distance between society and educational institutions is narrowed.

Obstacles to Incorporating OBC in Sierra Leonean Higher Education Institutions

Although it is absolutely vital to bring educational programmes in line with Sierra Leone's national objectives for socio-economic development, there are still significant barriers to applying the outcome-based curriculum in the universities of the nation. Among these barriers are the following:

a. Little Stakeholders Participation in OBC's planning, design, development, and implementation.

Effective OBC implementation calls on a joint effort among many different stakeholders, including academics, industry, and the government. Creating relationships and objectives may be difficult (Bangura, 2021). To guarantee that, significant stakeholders are properly engaged and participate in the planning, development, and execution of OBC, the authorities of the Ministry of Technical and Higher Education and other interested parties must collaborate and discuss concerns related to the effective execution of OBC in Sierra Leone's institutions of higher learning. Doing this guarantees that these partners in the growth of the country are engaged and well-versed in their Terms of Reference in promoting OBC vision, missions, and objectives of higher education institutions. Most of these undergraduates and postgraduates as well as their employers should be aware of their obligations. Fitzpatrick and Locke (2018) contend the disconnect between these actors makes academic programs less useful and realistic in the actual world.

b. Lacking Funding Implementation of OBC calls for a significant financial investment. From its beginning in 2018 through its conclusion in 2021, the SPHEIR initiative consumed a large sum of funds covering every aspect from planning to actual implementation. Financial commitment covers materials, evaluation techniques, employee training, and curriculum development from the planning phase to the execution stage. All of these relate to finance. The government never funds public colleges and polytechnics sufficiently to cover their financial obligations. Most of these tertiary institutions run on limited funds, thus they are always in debt. Jalloh and Kargbo (2023) support this since, given the economic difficulties Sierra Leone is going through, providing enough money to support curriculum change in institutions of higher education remains a difficult task. Additionally, they noticed that many institutions lack the requisite expertise in measurement and assessment and that many of their staff members have little training as assessment officers evaluating the three domains—cognitive, psychomotor, and affective—of students in HEIs.

c. Insufficient Professional Training

Bangura and Sesay (2021) confirm that the majority of HEI personnel are not properly trained in OBC by stating that Sierra Leone HEIs have few opportunities for professional development and that many instructors have limited exposure to contemporary pedagogical training. This results in opposition to change and difficulty in implementing teaching. 5. In HEIs, there is a poor system of monitoring and oversight. A significant obstacle to the implementation of OBC in higher education institutions is the lack of oversight and supervision of lectures in the various departments of their academic program, including whether they adhere to curriculum templates that link learning outcomes with teaching and learning, and assessment. Sadly, the majority of these schools' departmental heads in the faculties fail to adhere to the deadlines for submitting updated academic programs. Many of these teachers, who did not have the opportunity to participate in the SPHEIR Project training, continue to employ the Traditional Lecturer Centered Curriculum to a large extent. As Thomas and Bendu (2022) argue, this prevents ongoing curriculum improvement and evidence-based decision-making.

d. Absence of Institutional Support and a Policy Framework

The majority of Sierra Leone's HEIs are missing a national framework that directs the institution toward successfully adopting and implementing the OBC. This prevents institutional participation in a national initiative of this magnitude, resulting in institutional priority gaps. This is in line with the Ministry of Higher and Technical Education's (2021) statement that the long-term viability of OBC adoption is still questionable in the absence of effective governance, quality assurance procedures, and leadership.

CONCLUSIONS

The move to OBC in Sierra Leone's higher education institutions is a progressive step toward addressing the gaps that were seen in the traditional lecture-based curriculum. This move offers a path that leads to

the creation of globally competitive graduates who are able to tackle national challenges and contribute to development. Despite the importance of better graduate skills, industry alignment, and internal competitiveness, issues such as inadequate infrastructure, financial limitations, regulatory loopholes, and resistance to change cannot be ignored. The promotion of OBC adoption and sustainability in HEIs should be a collaborative endeavor involving the participation of key stakeholders, such as academics, administrative officials of HEIs, companies, and civil society groups. This is because the sustainability of any program depends on political will, ongoing curriculum assessment, industry collaboration, and the implementation of efficient quality assurance mechanisms. If these identified measures are taken into account, OBC will turn HEIs into a power house of innovation, enabling graduates with the necessary skills and knowledge to meet the challenges of the 21st century, and thereby act as a catalyst for national development.

Recommendations for Sustainability of OBC in Sierra Leone's HEIs

The effective application of OBC in higher education institutions requires the involvement and cooperation of all important stakeholders in Sierra Leone in order to meet the objectives and expectations of higher education institutions for national development. Bearing this in mind, the following recommendations are offered to ensure the long-term sustainability of OBC in Sierra Leone's higher education institutions:

a. Academic staff—including faculty deans, heads of department, lecturers, administrative staff such as principals and registrars, and Quality Assurance Directors—should all receive thorough training for capacity building and professional development so as to completely grasp and maintain the potential of OBC. This will guarantee they are up on every facet of the effective execution of OBC. Robust, all-encompassing training programs including seminars, workshops, symposia, and certifications are required by polytechnics as well as private and public institutions. These procedures guarantee that their teaching skills—including critical thinking and problem solving—and that the learning results meet the standards set by Spady (1994) and Harden (2007) through their teaching and learning evaluation techniques. HEIs can set up faculty school development initiatives to increase OBC capacity to this aim.

b. Financial Aid from Development Partners and the Government

Effective and long-lasting of any educational program requires adequate financing. In this regard, the government should ensure that HEIs receive sufficient funds to address the main financial challenges identified by Killen(2000), namely curriculum planning, development, and implementation; staff training on the fundamentals of OBC; monitoring of HEI teaching/learning; teaching aids; ICT equipment; and infrastructure.

c. Regular Stakeholder Meetings for Active Participation and Collaboration

Regular contacts with important stakeholders, including university officials, comprising academic and administrative personnel, professional organizations, parents, workers, MTHE officials, and TEC, should be actively involved through cooperation to recognize the need of assisting for the successful adoption of OBC, consistent with the assertion of (ABET,2023) that establishing feedback mechanisms from stakeholders will aid in revision and upgrading of the content of the curriculum.

d. Effective Monitoring and Supervision Mechanism to Improve Quality Assurance

A national framework should be in place for the monitoring and supervisory systems assuring that HEIs are periodically monitored on the implementation of OBC; to make sure that the major elements involved, such learning outcomes, content delivery, and assessment processes, are observed throughout the curriculum template sent to all HEIs, and to ascertain if they revisit the contents of their academic programmes.

e. Regular Three-Year Review of Academic Curricula

Every three years HEIs should also establish a Quality Assurance Directorate headed by senior officials to oversee the operations of the directorate in guaranteeing that institutional quality is observed and maintained. This is done to reflect changes required for national and social growth that meet international criteria

f. Public Awareness and Sensitization

To raise public awareness of the effectiveness of OBC, there should be a national campaign and awareness of the adoption of OBC. Among lecturers, parents, MTHE officers, students, employers, legislators, professional organizations, and others

g. Using technology to map curricula and track outcomes

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