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CURRICULUM DEVELOPMENT AND IMPLEMENTATION: IDENTIFYING KEY GAPS AND CHALLENGES IN EDUCATION SYSTEMS

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ABSTRACT

This literature review examines the challenges and gaps in curriculum planning, development, implementation, and evaluation within contemporary education systems. While curriculum works as the foundation of education, modeling student learning and preparing them for personal and professional success, there are constantly ongoing issues affecting its effectiveness. These contain limited teacher involvement in curriculum design, a shortage of curriculum experts, insufficient contextualized teacher support, and inadequate alignment with employment and industry needs. Another difficulty in implementation includes having time constraints, resource limitations, financial barriers, and professional development gaps, further complicate the realization of educational goals. Moreover, evaluation processes often fail to ensure curricula remain responsive to real-world demands and future workforce requirements. Closing the existing gaps will demand inclusive, well-resourced and evidence-based approaches to developing curriculum that incorporates views of teachers, technological integration, and industry relevance. Recommendations indicate the need for cooperation between educators and policymakers among others in creating an education system that is responsive, inclusive, and able to prepare students to meet needs in the future.

Introduction

The process of gaining values, information, and skills is called education. Curriculum is a planned educational experience that includes academic subjects and learning activities designed to achieve specific educational outcomes (Baharuddin et al., 2024). It's a continuous process that molds people and communities (Kerševan, 2024). This makes people the ability to think critically, solve problems, and come up with new ideas. (Bustillo, 2023) . A high-quality education is essential for both individual and community development since it produces knowledgeable citizens, competent professionals, and moral leaders, By connecting educational outcomes to accountability and evaluation criteria, curricula are created to transmit pertinent competencies. The curriculum serves as a structured plan within education, outlining subjects and experiences necessary for students to achieve educational goals (Indah, 2021). The foundation of education is the curriculum. Students' learning experiences are shaped by it, giving them the resources they require to thrive in their academic, social, and personal lives. The curriculum guarantees that educational institutions satisfy the many requirements of students while equipping them to prosper in a world that is changing quickly by providing structure, consistency, and relevance.

To provide quality curriculum, educational institutions follow curriculum development stages as it involves the systematic planning, designing, and refining of educational programs. This stages ensures that educational institutions provide relevant, high-quality, and effective learning experiences that align with both institutional goals and broader societal needs. Curriculum planning, development, implementation, and evaluation form the backbone of education systems globally for achieving educational goals and fostering student learning. Despite the extensive literature surrounding these topics, significant challenges and gaps persist that hinder effective curriculum practices.

This review aims to explore the challenges and gaps in curriculum development and implementation in education. Taking into account the existing research, we would like to focus on the problems educators, schools, and policymakers are confronted with while constructing and implementing effective curricula. Its main purpose is to offer insights that can help improve education, making it more inclusive, relevant, and better suited to the needs of students and the world around them. The following are the noted key gaps and challenges on curriculum planning and development

Curriculum Planning and Development

- **Limited Teacher Involvement:**
  Teachers have been excluded from being involved in the curriculum development process, where they are seen as implementers and not involved in contributing to the curriculum. Due to this form of exclusion, it leads to confusion, and this disorganization negativity hampers the effective implementation of the curriculum because the teachers will be able to understand the students' needs better. (Luo, 2021).

  Curriculum planning comprises multiple stakeholders, including administrators, students, and parents. The absence of input from these other groups could result in a narrow view of curriculum effectiveness. By involving such viewpoints, the general approach of the school curriculum planning would have been well represented to all members of the school community. (Nur, 2022)

  Garces, (2017) covers the perception of the pre-service teachers about the curriculum, an in-depth study of the experiences and problems of the teacher trainers is missing. Understanding how teachers' deals with the conflicts between complying with national guidelines and addressing the needs of pre-service teachers would provide a more comprehensive perspective.

- **Need for Contextualized and Sustainable Teacher Support:**
  Effective curriculum planning must consider the specific contexts in which teachers work and ensure that professional support is sustainable over time. This approach is vital for helping teachers provide long-lasting, beneficial instruction to their students (Mabunda, 2023).

  Staff Training and Preparedness for Technology-Enhanced Learning must be done to be well-trained to adapt to the technology-driven learning environment. Further research could investigate the training needs and preparedness of faculty members in delivering technology-enhanced curricula. (van Vuuren et al., 2023)

  There is limited exploration of the role of faculty development in adapting to new curriculum frameworks (Aslam et al., 2024) Research could investigate how faculty training and support systems influence the success of curriculum changes, particularly when transitioning to competency-based education models.

- **Relevance to Employment and Terminal Competencies:**
  Curriculum development should ensure that students acquire knowledge and skills relevant to future employment. A curriculum aligned with workforce needs can foster competitiveness, productivity, and readiness for the labor market (Thoriq, 2023; Mahmudah & Putra, 2021).

  Integrated approaches to curriculum design are believed to enhance student engagement by making learning more relevant and connected to real-world issues. By breaking down subject silos, students can explore complex concepts from multiple perspectives, leading to deeper understanding and the development of critical thinking (Moss et al, 2019)

Overall, these gaps illustrate the need for more inclusive, well-resourced, expert-driven, and employment-oriented curriculum planning to meet the demands of modern education.

Curriculum Implementation

- **Time Constraints and Student Readiness:**
  Teachers often struggle to cover all requisite competencies due to limited instructional time. Moreover, there is a mismatch between the assumed prerequisite skills in the curriculum and the students' actual skills which slows down learning and impedes effective curriculum delivery. Additionally, many of the students are not well-prepared for the curriculum content, intensifying these challenges (Robertson et al., 2021).

- **Technological and Resource Limitations**:
  The lack of sufficient technological resources and instructional materials is a significant barrier to effective curriculum implementation. This is particularly pronounced in developing countries, where there is limited access to technology-assisted instructional tools, professional development opportunities for online teaching, and research funding for curriculum development (Barrot, 2020; Mafugu, Tafirenyika & Abel, 2022; Abragan et al., 2022).

- **Financial Constraints:**

Many institutions lack adequate financial resources, limiting their ability to procure necessary materials and provide proper training for effective curriculum implementation (Fasinro, 2024).

- **Professional Development Needs:**
  Many of them face challenges mainly because of insufficient content and pedagogical knowledge when trying to introduce new curricula. Continuous professional development is, thus, essential to ensure that teachers are adequately equipped to handle the methodologies and instruments introduced by new curricula. Teachers' Training opportunities are necessary to bridging the gap between the planned and implemented curriculum (Fasinro, 2024; Elfira, 2023).

  Bongco, (2017) Teachers face difficulties in adapting to the new curriculum due to inadequate training and resources. The rapid pace of reforms creates confusion, making it challenging for teachers to fully understand and implement the policies effectively. Teachers struggle to balance the high expectations set by the curriculum policies with the practical realities of their classrooms. This includes managing limited resources, large class sizes, and varying student needs. This study concludes with the idea that the success of curriculum implementation depends largely on how teachers understand and implement curriculum polices. Therefore, emphasis must be given to making it certain that our teachers are provided with the resources and support that they need in order to traverse a world that they are only starting to learn to live in.

- **Generation and Technology Gaps:**
  A generational divide between fresh graduates and more senior teachers often results in discrepancies in technological proficiency. Younger teachers may be more comfortable with technology, while older teachers may require additional training to incorporate it into their teaching (Elfira, 2023).

- **Alignment with Industry and Employment Needs:**
  Skills gap is the most important drawback for the implementation of curriculum. The competencies of students lag behind the needs of the workforce. Educational institutions, especially in developing economies, struggle to align their curricula with industry requirements that leads to a growing demand for reskilling (Barrot, 2020).

- **Institutional and Curriculum-Related Barriers:**
  Institutional constraints, such as availability of resources, and also lack of support from different stakeholders, further complicate curriculum implementation. In addition, curriculum-related issues include misalignment with educational goals and ineffective curriculum design that does not completely support student learning needs (Aslam, 2024).

These gaps highlight the need for better resource allocation, teacher training, technological integration, and curriculum alignment with both educational goals and industry demands to ensure successful curriculum implementation.

Curriculum Evaluation

- **Industry-Education Alignment:**

  An existing gap persists between industrial requirement and the competencies of graduates from industry. The deficiency of alignment between education systems and emerging job markets is a persistent issue. This gap emphasizes the need for closer collaboration between educational institutions and industry to ensure curricula meet the evolving demands of the workforce (Barrot, 2020; Wanyeki et al., 2017; Naidu & Narayan, 2021). This is also the same with the study of Oviawe (2017), that there are skill gaps due to inadequate industrial training duration and mismatched job placements during internships. Conflicts exist between school teachings and actual job practices, leading to insufficient training experiences for students. Many institutions also struggle with low-quality training environments and resources, which impedes the development of necessary skills for the job market.

  To bridge this gap, according to Balada, (2024), designed an intervention plan that focuses on enhancing non-technical skills like time management and communication, technical skills like computer programming and food preparation, and behavioral skills like persistence and stress management. This plan aims to align academic programs with current industry needs and ensure students graduate with job ready skills. The researcher also recommends activities to improve students' workplace readiness and technical proficiency based on industry standards. The researcher suggests schools with TVL tracks and home economics strands propose activities to improve various skills. By implementing the intervention plan and addressing the gaps between curriculum and industry needs, schools can better equip students for the job market. The study's results can be disseminated through various channels to stakeholders like teachers, school heads, and curriculum specialists

  Saong et al. (2023) also argued that ensuring all students acquire skills required to adapt to the rapidly changing conditions and demands of the labor market is. Universities needed to think about how they prepare their graduates to be employable. Higher education institutions needed to equip students to work in jobs that did not yet exist, use cutting-edge technologies, and find solutions to challenges no one had thought of. However, there was some debate about whether university courses

adequately prepare students for 21st-century workplace skills to prepare them for the real contexts involved in their professional practice

- **Real-World Relevance**:
  Curricula and courses often fail to adapt to the complex nature of real-world work environments. There is a call for curricula that produce meaningful learning outcomes and that are responsive to the needs of the industry, ensuring students are equipped with skills that are directly applicable in the workplace (Wanyenki, 2017 and Naidu & Narayan, 2021).

  Bridging the gap between what the industry requires and what the academe produces remains elusive (Volzer et al., 2021). This talks about a problem that many people in education and business are facing. This problem is about the difference between what companies need from workers and what schools and universities are teaching. The skills gap refers to the competencies that the industry needs but do not match with the competencies that graduates possess.

- **Insufficient Program Evaluation**:
  The lack of thorough evaluation of curriculum effectiveness through program assessments is a significant gap. Program evaluation is critical in determining whether education has strength, weaknesses, and even overall effectiveness. This information is very critical in making informed decisions about which areas need improvements. Absence of this data may lead to difficulty in making informed decisions about improvements which hampers efforts to enhance the quality of education and ensure student success (Nevenglosky, n.d.).

- **Preparedness for Future Demands**:
  The current educational system often fails to prepare students effectively for the future demands of society. It is required to design a curricula that develop critical thinking, innovation, problem-solving, emotional intelligence, and communication skills—qualities that are necessary for success in the modern world. The focus should shift from memorization to developing competencies that align with the real-world challenges students will face after graduation (Barrot, 2020).

These gaps highlight the need for a more dynamic, responsive, and evidence-based approach to curriculum evaluation. Educational institutions must work in partnership with industries to develop curricula that are not only aligned with current job market needs but also foster the skills and attitudes students will require in the future.

Conclusion

In conclusion, the general concerns emphasized in the literature are numerous major problems that arise in curriculum planning, development, implementation, and evaluation. In these problems, there are those on the participation of teachers in curriculum development, the financial factor, the lack of curriculum experts, and the need for continuous support-to really know what is wanted by all teachers across different contexts. Apart from these obstacles, another challenge to curriculum implementation is the skill attainment gap between students and the workforce. To overcome such hurdles, it is essential that teachers be given better professional development opportunities, access to maximum technology and resources, and curricula made even more industry-relevant.

Finally, it is an appeal for a much more inclusive and appropriately supported process of curriculum development-in which teachers are involved, classrooms become better attuned to the needs of their students, and students are better prepared for the requirements of a future workplace. In that sense, we might best see an education system that truly succeeds in its bid to help prepare children for the realities of a changed world.

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