



# GAPS AND CHALLENGES IN CURRICULUM PLANNING, DEVELOPMENT, IMPLEMENTATION, AND EVALUATION: A LITERATURE REVIEW

Noel B. Tongohan

*Teacher I*

*Tanay West Integrated National High School*

*Department of Education – Philippines*

*Noel B. Tongohan is currently pursuing doctorate degree program in educational management in University of Rizal System - Morong, Rizal, Philippines.*

*E-mail: tongohanxs@gmail.com*

## KeyWords

Gaps and Challenges, Curriculum Phases, Curriculum Processes, Curriculum Planning, Curriculum Development, Curriculum Implementation, Curriculum Evaluation

## ABSTRACT

This literature review investigates the gaps and challenges in curriculum planning, development, implementation, and evaluation. The literature in this review was gathered from several peer-reviewed articles and published on recognized websites. As reviewed in the literature, there are gaps and challenges that need to be addressed in each phases of curriculum – planning, development, implementation, and evaluation. The review identified diversity of learners, teacher and training preparedness, availability of resources, infrastructure limitations, and stakeholders engagement as challenges in curriculum planning. Meanwhile, insufficient training, collaboration and communication, cultural differences, assessment, and decision-making are the gaps and challenges in curriculum development. On the other hand, insufficient training and professional development, insufficient resources, poor school infrastructures, curriculum misalignment, and inadequate leadership are the challenges in curriculum implementation. Lastly, lack of training, lack of resources, technological integration, alignment issues, and administrative support are the gaps and challenges in curriculum evaluation. Overall, the identified gaps and challenges in this literature can be factors that can hinder the curriculum delivery, hence, can greatly affect the processes in the implementation of the curriculum.

**The first page should be used only for Title/ Keyword/ Abstract section. The main paper will start from second page.**

## MAIN PAPER STARTS HERE...

Curriculum serves as the guide for all educators to know what is necessary for the teaching and learning, which allows learners to access academic experiences through various strategies in gaining knowledge and developing their skills. The curriculum can be modified or changed based on different circumstances that are thoroughly studied by many experts and educators in formulating possible solutions to address such challenges. Curriculum is a standards-based sequence of planned experiences where students practice and achieve proficiency in content and applied learning skills that include the necessary goals, methods, materials and assessments to effectively support instruction and learning (State of Rhode Island, Department of Education). One good example of such change is the recalibration of the K to 12 Curriculum in the Philippines to MATATAG Curriculum, which is effective this school year 2024 to 2025. The MATATAG Curriculum is an interesting move that emphasizes five skills such as language, reading and literacy, mathematics, nationalism, and good manners and right conduct, however, some may look at it as a product of political rebranding (Estrellado, C., 2023). The initiation of this MATATAG Curriculum undergone research and studies to provide deeper understanding on the current situation of the educational system. Curriculum needs to be planned using deep and deliberate actions to enhance the quality of learning experiences among students, this also includes the development of the curriculum together with its implementation and evaluation. These four (4) processes will be the focus of this literature review.

This literature review has two (2) main goals. First, is to discuss the four (4) processes that involve curriculum development such

as planning, development, implementation, and evaluation, which can be applied to primary and secondary schools or the higher education institutions. Lastly, is to address the gaps and problems in the peer-reviewed articles and examine its impact or how it is related to the current situation of the educational system. Overall, this article aims to provide the importance of curriculum development processes and the challenges that may encounter from planning, development, implementation, and evaluation of a curriculum.

### **CURRICULUM PLANNING**

Curriculum planning is the first step in crafting a guide for educators suited for the learners, which can be a result of thorough study from the evaluation of the previous or current curriculum. It is also known as curriculum mapping that acts as the roadmap which allows educators to navigate their learners toward the achievement of the projected outcomes (Goyal, A., 2024). Curriculum planning involves outlining the content to be learned, the methods of instruction, the rationale behind the learning objectives, and the timing of each component, all aligned with specific goals and key milestones. This process establishes a structured framework for teaching a subject, facilitating stage-wise and grade-wise progression in learning. Curriculum planning faces different challenges towards its development, some of these challenges are diversity of learners, teacher training and preparedness, availability of resources, infrastructure limitations, and stakeholders engagement.

#### **Diversity of Learners**

Teachers are exposed to a variety of learners from gifted and talented to those who need additional support in their learning, this also includes students with different cultural backgrounds, interests, and needs. In curriculum planning, there will be a challenge among the gifted and talented learners. VanTassel-Baska, J. et al. (2021) explained that educators must tailor their approaches to meet the varied needs of gifted learners, which can be complex and time-consuming. Through this, they will not feel boredom while doing their task in school activities. Another challenge in curriculum planning is the cultural background of each learner. In multicultural classrooms, teachers may struggle to address the varied cultural backgrounds of students, making it challenging to create an inclusive learning environment that respects and reflects all cultures (Offorma, C., 2016). Hence, it is important to know the background of our learners to establish respect for one another. Lastly, are the interests and needs of the learners which are applicable to almost all learning areas. Guo, H. (2020) explained that physical education classes often include students with varying abilities and interests, making it difficult to design a one-size-fits-all curriculum.

#### **Teachers Training and Preparedness**

As a second parent of the learners, educators need to develop their personal and professional growth in following the trends in the educational system, which also covers the pre-service teachers. Even though there are teachers who are willing to participate in different training and seminars to develop their skills, there are still who feel contented with what they have now, hence, it greatly affects the delivery of the teaching-learning processes. Many pre-service teachers report feeling unprepared for the challenges they encounter during their practicum and the real teaching scenario (Castro-Garces, A., et al., 2017). According to Alnaji, A. O. (2022), there is often insufficient training and professional development opportunities for educators involved in implementing new curricula. This can lead to inconsistencies in teaching methods and hinder the overall effectiveness of the educational program (Morsy, S. et al., 2019). It is important to note that administrative support is also a factor to teachers training and preparedness especially those who are new in the service. Offorma, G. C. (2016) pointed out that many teachers lack adequate training and experience in cultural education, which hampers their ability to effectively incorporate cultural elements into their teaching practices.

#### **Availability of Resources**

It is important to have the resources to support the teaching-learning process. This includes but not limited to financial resources, instructional materials, and technology integration. Regular classes or special classes, or even the madrasah education requires support in delivering quality education, which involves availability of resources. Many educators may lack access to these resources, hindering their ability to implement the recommended practices effectively (VanTassel-Baska, J. et al., 2021). These resources are needed to implement practices successfully. Kelly, N. (2019) emphasized that schools may not have the necessary programs or funding to facilitate collaborative curriculum development effectively. Madrasahs often face challenges related to insufficient infrastructure, teaching materials, and technological resources (Sugiarto, D., et al., 2023). The allocation of resources should be done in accordance with the priorities of the school, as well as the different programs. Epler, P. (2020) highlighted that insufficient financial resources can limit access to necessary materials and support systems for both teachers and students. Educators often face a scarcity of materials and resources that authentically represent various cultures, making it difficult to provide meaningful cultural experiences in the classroom (Offorma, 2016).

#### **Infrastructure Limitations**

Physical facilities are also important to provide quality education, however there are still schools who are lack in classrooms and facilities, thus, has indirect effect on curriculum planning. The facilities should be conducive and provide learning environments among different learners, which have internet connectivity, equipment, and other learning materials. This includes a shortage of science teachers and essential teaching materials, impacting the quality of education delivered (Epler, 2020). Garibay, O. et al., (2015) stated that schools may face infrastructural challenges, such as inadequate technology or internet access, which can impede the successful implementation of an adaptive curriculum system. The technology has a significant impact on the teaching and learning process, hence, the facilities and infrastructure in schools should be well-equipped with technologies to address learners needs.

#### **Stakeholders Engagement**

Stakeholders could also be a challenge in curriculum planning, since they are part of the school's mechanisms and one of the important persons in the school-community relationship. Samson, P. (2019) emphasized that one of the primary difficulties is reaching

an agreement on priorities among diverse stakeholders, which can lead to conflicts and delays in the planning process. He also stated that different stakeholders often have varying objectives and demands, which can result in tension and resistance, complicating the collaborative process. This is the main reason why everyone needs to agree in one common goal to avoid conflict and misunderstanding either the program is for the regular class or special class, or even the madrasah education. There is often a disconnect between madrasahs and the communities they serve, which can limit support for educational initiatives and reduce student enrollment (Sugiarto, D. et al., 2023). According to Morsy S., et al. (2019), successful curriculum planning requires input from various stakeholders, including faculty, students, and community members. This only provides an idea that the voice of all the stakeholders should be heard.

### **CURRICULUM DEVELOPMENT**

Curriculum development is the second step in crafting a guide for educators suited for the learners, this is done through careful planning with the integration of research-based studies and reports. Curriculum development is a planned, thoughtful and deliberate course of actions that ultimately enhances the quality and impact of the learning experience for students (Camosun College, n.d.). The process encompasses the creation and structuring of educational activities aimed at achieving specific learning objectives. It also includes a careful evaluation of these outcomes. The primary aim of the curriculum is to improve the effectiveness and significance of the teaching and learning experience. Curriculum development faces different challenges towards its implementation, some of these challenges are insufficient training, collaboration and communication, cultural differences, assessment, and decision-making.

#### **Insufficient Training**

Teachers play a vital role in curriculum development hence they need to have knowledge and skills in such curriculum, which they can acquire through trainings and seminars. Insufficient training can be a challenge in attaining quality education. Many teachers lack the necessary training to engage in curriculum development meaningfully. This absence of professional development opportunities limits their ability to participate actively (Luo, J. et al, 2021). According to Shinno, Y. et al. (2018), many educators may lack the necessary training or confidence to guide students through the complexities of mathematical proofs, which can hinder student learning outcomes. In senior high school, specifically with the Science, Technology, Engineering, and Mathematics (STEM) strand, there is a shortage in training of teachers. Shahidullah, K. et al. (2022) stated that there is a scarcity of qualified academicians and professionals capable of developing effective integrated STEM programs tailored to disaster management needs. Without adequate training, the adoption of new methodologies may falter, making it essential to invest in professional development programs (Duran V., et al., 2020).

#### **Collaboration and Communication**

As mentioned in curriculum planning, the voice of all the stakeholders needs to be heard to avoid conflict and misunderstanding, this also promotes collaboration and communication in achieving one common goal and that is to provide a better curriculum among learners. Jameson E., et al. (2021) pointed out that effective communication among stakeholders (teachers, administrators, curriculum developers) is often lacking, which can lead to misalignment between curriculum goals and classroom practices. There is a significant gap between policymakers and teachers, leading to a disconnect that prevents teachers from contributing effectively to curriculum discussions and decisions (Luo, J. et al., 2021). One of the difficulties in collaborating with other stakeholders is the varied experiences and ideas, hence, inconsistencies may arise. According to Vreuls, J., et al. (2022), different teams involved in curriculum development often have varied experiences and narratives, which can lead to inconsistencies in the implementation of educational programs. Ensuring meaningful participation from a wide range of stakeholders, including students, faculty, and external partners, can be complex (Moriau, L. et al., 2024). The school leader needs to balance the variation between the ideas of the internal and external stakeholders to acquire better results from different points of view.

#### **Cultural Differences**

Cultural variances can be a barrier to curriculum development, since that each member of the institution has their own belief, either it is their tradition or norms. This is applicable in any school institutions whether it is located in advance or developing countries. Moriau, L. et al. (2024) explained that the EUTOPIA alliance comprises multiple universities across different European countries, each with unique educational cultures and practices. The necessity of cultural and linguistic factors when designing curriculum content and sequencing must be considered (Shinno, Y. et al., 2018). Even though we are already in a technology-oriented society, traditional educational models are still embrace by some institutions. Shahidullah, K. et al. (2022) stated that transitioning from traditional educational models to an integrated STEM approach may encounter resistance from stakeholders accustomed to conventional teaching methods. The curriculum must reflect their unique perspectives and needs while also aligning with broader educational standards (Haiy, A. et al., n.d.).

#### **Assessment**

Evaluating the learners' performances can be done through rubrics which help the teachers to record and monitor the progress of each student. In different learning areas, assessment can be done either traditional or technology-based methods. According to Roozafzai, Z. (2024), evaluating the impact of cognitive task complexity on language learning is complex due to the multifaceted nature of language acquisition processes. Traditional assessment methods may not adequately capture the learning outcomes associated with interdisciplinary education (Chittle, L. et al., 2023). In developing a curriculum, the assessment of learner's understanding should be considered, in a sense that it is not only about memorization of facts and ideas, but also using their deeper understanding and comprehension. Shinno, Y. et al. (2018) emphasized that current assessment methods may not adequately evaluate students' understanding of proof, leading to a focus on rote memorization rather than deep comprehension. The teachers who have the re-

sponsibility to assess the learner's understanding must evaluate their performances through higher-order thinking skills.

### **Decision-Making**

Data collection is important in decision-making, especially when it comes to crafting programs to address a problem. The information gathered can be used in curriculum development with the agreement of each participating stakeholders. The absence of robust data collection and analysis can hinder the identification of improvement opportunities and the measurement of progress (Duran, V. et al., 2020). Haiy, A. et al. (n.d.), pointed out that there are difficulties in establishing effective decision points within the curriculum design process that are relevant to the Philippine context. These difficulties arise from different concepts and ideas that may differ from one another, hence, results to staggered decision-making. The collaborative nature of curriculum development can lead to confusion among group members, making it difficult to reach consensus on decisions, particularly when some participants lack experience in the process (Bas, G. et al., 2019).

## **CURRICULUM IMPLEMENTATION**

Curriculum implementation is the third step in crafting a guide for educators suited for the learners, which is the result of curriculum development with the combined efforts of different stakeholders, schools and institutions, and educational leaders. Curriculum implementation refers to how teachers deliver instruction and assessment through the use of specified resources provided in a curriculum (Nevenglosky, E., et al., 2019). Curriculum implementation involves the delivery of the planned curriculum to children, encompassing the methods and practices employed to enhance learning. It focuses on the daily teaching activities that support children's progress, including interactions among individuals, the learning environment, and the tasks assigned. Additionally, it considers the resources available, and the opportunities created for learning. Curriculum implementation faces different challenges towards its delivery, some of these challenges are insufficient training and professional development, insufficient resources, poor school infrastructures, curriculum misalignment, and inadequate leadership.

### **Insufficient Training and Professional Development**

Just like any other professions, teachers must be updated with the trends in educational system, specially when it comes to the implementation of the curriculum. Fasinro, K. (2024) stated that a notable deficiency in qualified personnel in curriculum studies leads to subpar curriculum design and implementation. Previous professional development initiatives have often been ineffective due to a lack of understanding of teachers' specific needs for knowledge and skills related to curriculum implementation (Chuene, D. M., et al., 2024). It is difficult to implement the curriculum if there is insufficient knowledge and background on how this must be delivered, that is why the support among teachers must be considered. According to Sathorar, H. et al., (2021), the lack of institutional support for professional development in critical pedagogy limits lecturers' ability to implement transformative practices effectively, which is supported by Mabunda, P., (2023), stating that many educators feel unprepared due to inadequate professional development opportunities, which affects their confidence and ability to deliver the curriculum successfully. The attitudes and beliefs of teachers significantly affect their ability to implement changes effectively, leading to resistance or inadequate adaptation.

### **Insufficient Resources**

Implementation of curriculum requires various resources, which includes but are not limited to financial support, learning materials, and technology-based resources. Many institutions do not possess sufficient instructional materials, creating an un conducive learning environment that affects the delivery of the curriculum (Fasinro, K., 2024). Textbooks and learning materials such as modules are also insufficient, hence, the delivery of the curriculum is being affected. Mabunda, P. (2023) emphasized that a significant issue highlighted is the lack of essential resources, such as textbooks and teaching materials, which hamper effective curriculum delivery. There is often a shortage of essential resources, including teaching materials and infrastructure, which can significantly affect the quality of curriculum delivery. Implementing new curricula often requires significant investments in teacher training and educational resources, which may not always be available (Gouëdard, P., et al., 2020).

### **Poor School Infrastructures**

Inadequate school infrastructures can be a barrier to curriculum implementation, which can hinder the curriculum delivery. According to Chuene, M., et al., (2024), many schools, particularly in rural areas, suffer from inadequate infrastructure. This includes poorly maintained facilities that do not support effective teaching and learning environments. This is supported by Karakus, G. (2021), stating that poor school conditions can detract from the learning experience, making it harder to implement curricula successfully. Without the necessary infrastructure and classroom, the teaching-learning process can be affected, since that learners can be easily distracted by external factors. Mabunda, P. (2023) emphasized that contextual factors, such as socio-economic conditions and school infrastructure, play a crucial role in how well the curriculum is implemented. Addressing these challenges is crucial for enhancing the effectiveness of curriculum implementation and achieving educational objectives.

### **Curriculum Misalignment**

The delivery of curriculum should be aligned with what is being planned and developed. Through this, the vertical alignment of the curriculum can be established, hence, providing better results towards its monitoring and evaluation. A significant challenge is the misalignment between the intended curriculum and what is actually taught in classrooms. This discrepancy can lead to gaps in student learning and outcomes (Rudhumbu, N., et al., 2022). These gaps can hinder the goal of the implementation of curriculum, which often leads to unfavorable outcomes. Karakus, G. (2021) pointed out that this misalignment can stem from various factors, including inadequate planning and insufficient stakeholder involvement in the curriculum development process. The integration and adaptation of curriculum are also challenging in schools, most especially in elementary and senior high schools. Integrating STEM subjects into existing curricula presents logistical challenges. Teachers must create meaningful connections between disciplines while also adhering to standardized testing requirements, which can complicate lesson planning and execution (Clark, Q. et al., 2023).

While according to Ghunu, N. (2022), the thematic curriculum may not always align with the unique cultural and environmental needs of remote communities, necessitating adaptations that are often not feasible due to lack of resources or training. These challenges highlight the complexities of implementing a curriculum in educational settings and underscore the need for comprehensive strategies to overcome them.

#### **Inadequate Leadership**

A good leader should possess characteristics that serve as a role model of a strong leadership such as clear vision, commitment, communication and social responsibility. When these characteristics are not present to a school leader, it can lead to challenges and difficulties in the implementation of the curriculum. Fasinro, K. (2024) stated that insufficient leadership and a clear vision for curriculum implementation can result in disorganization and ineffective practices within schools. Poor communication and leadership within educational institutions can lead to a lack of clarity regarding curriculum goals and expectations, further complicating implementation efforts (Karakus, G., 2021). These challenges stress the complexities involved in successfully implementing educational reforms and underscore the need for strong leadership, including the good rapport of school leaders to teachers and other stakeholders.

### **CURRICULUM EVALUATION**

Curriculum evaluation is the final step in crafting a guide for educators suited for the learners, which includes the assessment of the planned, developed, and implemented curriculum with the regular monitoring of its implementation. The curriculum evaluation can also be used as a stepping stone in planning the next actions to be taken based on the results and assessment. Curriculum evaluation is an essential component in the process of adopting and implementing any new curriculum in any educational setting (Special Education Notes, n.d.). The goal of curriculum evaluation is to determine if the newly implemented curriculum is achieving its intended outcomes and fulfilling its established objectives. Additionally, curriculum evaluation aims to collect data that can highlight areas requiring improvement or modification. Curriculum implementation faces different challenges towards its assessment, some of these challenges are lack of training, lack of resources, technological integration, alignment issues, and administrative support.

#### **Lack of Training**

The preparedness of teachers in implementing and evaluating the curriculum is still a concern since that most of them feel they are insufficiently prepared for the curriculum delivery. Adin-Surkis, A., (2015) stated that many teachers feel inadequately prepared to implement the new curriculum effectively due to insufficient training and professional development opportunities. This lack of training can lead to confusion and inconsistency in how the curriculum is applied in the classroom. Teachers are anxious that they do not have the trainings needed for effective curriculum assessment. Many educators may not have sufficient training in effective evaluation methods, which can hinder the assessment process and lead to inadequate data collection and analysis (Yang, Y., 2017). Their knowledge and skills in media literacy is also a challenge to curriculum evaluation. According to Erdem, C., et al. (2022), many educators report insufficient training in media literacy, which hinders their ability to teach these skills effectively. The competence and expertise of the evaluators must also be considered, for such, Aygören, F. (2019) pointed out that not all evaluators may possess the necessary understanding or expertise to accurately assess educational quality, which could undermine the reliability of the findings. Teachers must still be involved in designing content, creating assignments, and refining assessments to ensure clarity and relevance (Thomas, M., et al., 2021).

#### **Lack of Resources**

It is challenging to implement and evaluate curriculum without the resources such as technological materials, financial support, and infrastructures, hence, it is one of the challenges that educational system faced in curriculum evaluation. Dündar, E. et al. (2017) explained that the lack of adequate resources—such as textbooks, technology, and trained personnel—impedes effective curriculum implementation. Many educational institutions struggle to provide the necessary materials that support innovative teaching methods and learner engagement. Teachers reported a significant shortage of textbooks, manuals, and instructional materials, which forces them to use personal resources for reproducing necessary documents (Sales, J. et al., 2023). The expenses which is additional burden to teachers is at hand, this only happens if there is a scarcity of resources. Insufficient resources, including time, funding, and materials, can impede the evaluation process. This limitation makes it difficult to implement comprehensive evaluations and can lead to superficial assessments (Yang, Y., 2017). The classrooms and facilities can also hinder the assessment of curriculum, which are contributory factors towards its implementation. According to Hoang, A., et al. (2020), many schools, particularly in rural areas, suffer from inadequate infrastructure, including dilapidated buildings and insufficient classrooms, which hampers the learning environment. This is supported by Sales, J. et al. (2023), stating that insufficient physical facilities in schools present a barrier to effective teaching and learning, limiting the overall educational environment. There is also a shortage of computers which are vital source of information and the fastest way in transmitting data such as results of curriculum implementation. Many schools faced constraints in terms of access to necessary technological resources, including computers and software (Gündüz, G. et al., 2022).

#### **Technological Integration**

Technological advancement is prominent in almost all human activities, which includes the economy, transportation, education, and others. In schools, the integration of technology was already introduced way back years ago, which benefited both the school and the learners. However, there are still schools who do not have access to internet, hence, they are left behind, thus, resulting in difficulties in assessing the curriculum. While technology can enhance learning experiences, disparities in access can create inequalities among students, further complicating curriculum delivery (Dündar, E. et al., 2017). Ethical considerations and reliance to technology are also concerns that need to be addressed. There is a risk that students might depend too heavily on AI tools for completing

assignments, which could undermine their learning process and critical thinking skills (Thomas, M. et al., 2021), they also added that the use of artificial intelligence (AI) requires access to extensive student data, raising issues related to privacy, consent, and compliance with regulations. This can lead to data privacy concerns and inaccuracy of curriculum evaluation, as well as the reliability of its results.

### Alignment Issues

The alignment of curriculum is also a challenge that needs to be addressed, this includes but are not limited to educational goals, learners' needs, and learning outcomes. According to Yang, Y. (2017), ensuring that learning objectives, content, activities, assessments, and outcomes are coherent and aligned is a significant challenge. Misalignment can result in gaps or overlaps that affect the curriculum's effectiveness. There is a concern that current curricula do not align well with societal expectations and educational goals, which can lead to a mismatch between what is taught and what students need to succeed in real-world contexts (Aslan, D., et al., 2016). Meanwhile, Dündar, E. et al. (2017) suggested that curriculum misalignment includes addressing different proficiency levels, learning styles, and cultural contexts, which can complicate the development of a universally applicable curriculum. This misalignment complicates effective teaching and assessment practices, making it difficult for educators to achieve the desired competencies in students (Solikhah, I., 2022). These challenges underscore the complexity of developing and evaluating curricula and highlight the need for ongoing research and innovation to address these issues effectively.

### Administrative Support

The school leaders also faced challenges to support teachers in implementing and evaluating the curriculum, this includes several workloads that can affect their leadership and monitor the status of the curriculum delivery. According to Arrieta, G. (2021), principals often face overwhelming administrative responsibilities that limit their ability to engage deeply in curriculum evaluation and instructional leadership. This can be applied to some schools where principals are having multiple workloads that hinder them to assist their teachers, especially when it comes to the implementation of the curriculum. The level of support from school administration can vary, impacting teachers' ability to implement the curriculum effectively. Inconsistent administrative backing can lead to confusion and frustration among educators (Adin-Surkis, A., 2015). Aside from financial resources and other teaching materials needed, the moral support from school leaders is crucial in boosting the morale of teachers, which allows them to do their work and optimize the teaching-learning process.

### Conclusion

To provide quality education is the main goal of each institution, hence, it is important to craft a curriculum that suits the needs of each learner which allows them to access the academic experiences. Curriculum undergoes stages before its full implementation, this includes critical phases and regular monitoring from its planning, development, implementation, and evaluation. Gaps and challenges that need to be addressed can be found at each phases, hence, policymakers, educational leaders, and stakeholders should formulate solutions for such problems. This literature review of several peer-reviewed articles provides the ideas on what gaps and challenges can be encountered on curriculum planning, development, implementation, and evaluation. Among these gaps and challenges, the most common are insufficient teacher trainings and preparedness, and lack of resources and infrastructures, which are common in rural schools and located in far flung areas. Overall, the gaps and challenges on this literature review must be considered with utmost importance, since that these can greatly affect the curriculum delivery and may hinder the implementation of such curriculum.

### References

- [1] Adin-Surkis, A. (2015). Teachers Evaluate the New Curriculum in English: Views Regarding Evaluation and Evaluation Tools. *Research in Education*, 93(1), 34-59. <https://eric.ed.gov/?q=curriculum+evaluation&pg=5&id=EJ1119839>
- [2] Alnaji, A. O. (2022). Curriculum Planning Model in General Education. *Journal of Curriculum and Teaching*, 11(5), 275. <https://doi.org/10.5430/jct.v11n5p275>
- [3] Arrieta, G. S. (2021). Curriculum Evaluation: Inputs for Principal's Instructional Leadership. *International Journal of Social Learning (IJSL)*, 1(2), 146-161. <https://doi.org/10.47134/ijsl.v1i2.45>
- [4] Aslan, D., & Günay, R. (2016). An Evaluation of High School Curricula Employing Using the Element-based Curriculum Development Model. *Journal of Education and Training Studies*, 4(7). <https://doi.org/10.11114/jets.v4i7.1477>
- [5] Aygören, F., & Er, K. O. (2019). New Approach at Evaluating the Private Schools' Curriculum: I-CODE Model. *Turkish Online Journal of Educational Technology - TOJET*, 18(2), 58-81. <https://eric.ed.gov/?q=curriculum+evaluation&id=EJ1211168>
- [6] Bas, G., & Sentürk, C. (2019). Teachers' Voice: Teacher Participation in Curriculum Development Process. *I.e.: Inquiry in Education*, 11(1). <https://eric.ed.gov/?id=EJ1217322>
- [7] Castro-Garces, A. Y., & Arboleda, A. A. (2017). Bridging the Gap between Curriculum Planning Policies and Pre-service Teachers' Needs. *English Language Teaching*, 10(12), 50. <https://doi.org/10.5539/elt.v10n12p50>
- [8] Chibiko Offorma, G. (2016). Integrating components of culture in curriculum planning. *International Journal of Curriculum and Instruction*, 8(1), 1-8. <https://files.eric.ed.gov/fulltext/EJ1207325.pdf>
- [9] Chittle, L., Kustra, E., & Houser, C. (2023). A Qualitative Examination of Science Faculty Members' Perceptions of Interdisciplinary Curriculum Development and Refinement. *Canadian Journal for the Scholarship of Teaching and Learning*, 14(2). [https://eric.ed.gov/?q=curriculum+development&ff1=dtYSince\\_2015&id=EJ1410232](https://eric.ed.gov/?q=curriculum+development&ff1=dtYSince_2015&id=EJ1410232)
- [10] Clark, Q., Capobianco, B. M., & Esters, L. T. (2023). Identification of Essential Integrated STEM Curriculum Implementation Components. *Journal of Agricultural Education*, 64(3), 43-61. <https://eric.ed.gov/?q=curriculum+implementation&id=EJ1410795>
- [11] Curriculum Development. (n.d.). Camosun College. <https://camosun.ca/about/centre-excellence-teaching-and-learning/curriculum-development>

- [12] Danu Sugiarto, & Agus Zaenul Fitri. (2023). Initiating Superior Madrasah Through Madrasah Curriculum Planning in the Era of Society 5.0. *IJECA (International Journal of Education and Curriculum Application)*, 6(2), 101-101. <https://doi.org/10.31764/ijeca.v6i2.15432>
- [13] Dayce Makakole Chuene, & Florah Moleko Teane. (2024). Resource Inadequacy as a Barrier to Effective Curriculum Implementation by Life Sciences Teachers in South Africa. *South African Journal of Education*, 44(2). <https://eric.ed.gov/?q=curriculum+implementation&pg=2&id=EJ1430070>
- [14] Dündar, E., & Merc, A. (2017). A Critical Review of Research on Curriculum Development and Evaluation in ELT. *Online Submission*, 2(1), 136-168. <https://eric.ed.gov/?q=curriculum+evaluation&pg=3&id=ED598965>
- [15] Duran, V., & Mertol, H. (2020). Kaizen Perspective in Curriculum Development. *Asian Journal of Education and Training*, 6(3), 384-396. <https://doi.org/10.20448/journal.522.2020.63.384.396>
- [16] Epler, P. (2020). Strategic Curriculum Planning. *Strategic Leadership in PK-12 Settings*. <https://www.igi-global.com/chapter/strategic-curriculum-planning/233703>
- [17] Erdem, C., & Eristi, B. (2022). Implementation and Evaluation of a Media Literacy Skills Curriculum: An Action Research Study. *International Journal of Modern Education Studies*, 6(1), 20-50. <https://eric.ed.gov/?q=curriculum+evaluation&pg=2&id=EJ1355445>
- [18] Garibay, O. O., & Mustafa Ilhan Akbas. (2015, November 6). Curriculum GPS: An Adaptive Curriculum Generation and Planning System. *Interservice/Industry Training, Simulation, and Education Conference*. <https://www.academia.edu/17865305>
- [19] Ghunu, N. M. S. (2022). The Challenges of Remote Area Elementary Schools in Thematic Curriculum Implementation. *International Journal of Instruction*, 15(2), 19-36. <https://doi.org/10.29333/iji.2022.1522a>
- [20] Gouëdard, P., Pont, B., Hyttinen, S., & Huang, P. (2020). Curriculum reform: A literature review to support effective implementation. *Www.oecd-ilibrary.org*, 239. <https://doi.org/10.1787/efe8a48c-en>
- [21] Goyal, A. (2024, July 8). Curriculum Planning: Definition, Importance and Benefits. *Extramarks Blogs: Weaving Stories for Schools, Students, and Parents; Extramarks*. <https://www.extramarks.com/blogs/curriculum-planning/>
- [22] Gündüz, Gülten Feryal, & Demir, (2020). Evaluation of 2017 Information Technology and Software Course Curriculum According to Teachers' Views: The Case of Eskisehir. *Malaysian Online Journal of Educational Technology*, 8(3), 59-83. <https://eric.ed.gov/?q=curriculum+evaluation&pg=4&id=EJ1260173>
- [23] Guo, H. (2020). Effect of curriculum planning for physical education in colleges on innovation ability. *International Journal of Emerging Technologies in Learning*, 15(12), 103-115. <https://doi.org/10.3991/ijet.v15i12.14527>
- [24] Haile, T. M., & Mekonnen, E. A. (2024). Impacts of Stakeholder Engagement on Curriculum Implementation in Ethiopian Defense University. *Pedagogical Research*, 9(2). <https://eric.ed.gov/?q=curriculum+implementation&id=EJ1421090>
- [25] Haiy, A., & Sali, A. (n.d.). Democratization of Curriculum Development: Theorizing Naturalistic Model in Philippine Madrasah Education. *International Journal of Curriculum and Instruction*, 566. <https://files.eric.ed.gov/fulltext/EJ1383080.pdf>
- [26] Hoang, A.-D., Pham, H.-H., Nguyen, Y.-C., Nguyen, L.-K.-N., Vuong, Q.-H., Dam, M. Q., Tran, T., & Nguyen, T.-T. (2020). Introducing a tool to gauge curriculum quality under Sustainable Development Goal 4: The case of primary schools in Vietnam. *International Review of Education*, 66(4), 457-485. <https://doi.org/10.1007/s11159-020-09850-1>
- [27] Jameson, E., Whitney-Smith, R., Macey, D., Morony, W., Benson-Lidholm, A.-M., & Leigh-Lancaster, D. (2021). Curriculum Development and the Use of a Digital Framework for Collaborative Design to Inform Discourse: A Case Study. <http://www.merga.net.au/>. <https://eric.ed.gov/?id=ED616157>
- [28] Justine, C. (2023, December 11). MATATAG Curriculum: Why Curriculum [must] Change? *ResearchGate*; unknown. [https://www.researchgate.net/publication/376410536\\_MATATAG\\_Curriculum\\_Why\\_Curriculum\\_must\\_Change](https://www.researchgate.net/publication/376410536_MATATAG_Curriculum_Why_Curriculum_must_Change)
- [29] Kabiru Fasinro. (2024). Curriculum implementation: Challenges and the prospect of education resource centres to aid effective implementation. *African Educational Research Journal*, 12(1), 1-5. <https://doi.org/10.30918/aerj.121.23.102>
- [30] Karakus, G. (2021). Solutions for Barriers in Curriculum Implementation. *African Educational Research Journal*, 9(2), 591-599. <https://eric.ed.gov/?id=EJ1301358>
- [31] Kelly, N., Wright, N., Dawes, L., Kerr, J., & Robertson, A. (2019). Co-Design for Curriculum Planning: A Model for Professional Development for High School Teachers. *Australian Journal of Teacher Education*, 44(7), 84-107. <https://eric.ed.gov/?id=EJ1227819>
- [32] Linde Moriau, & Angouri, J. (2024). Participatory Curriculum Development: The Case of EUOTPIA, a European University Alliance. *Curriculum Journal*, 35(3), 337-360. [https://eric.ed.gov/?q=curriculum+development&ff1=dytSince\\_2015&id=EJ1430162](https://eric.ed.gov/?q=curriculum+development&ff1=dytSince_2015&id=EJ1430162)
- [33] Luo, J., & Muyunda, G. (2021). Teachers' Voice in Zambia: How to Make Them Involved in Curriculum Development. *Online Submission*, 2(3), 388-397. [https://eric.ed.gov/?q=curriculum+development&ff1=dytSince\\_2015&id=ED629118](https://eric.ed.gov/?q=curriculum+development&ff1=dytSince_2015&id=ED629118)
- [34] Mabunda, P. (2023). The implementation of the curriculum and assessment policy statement: School managers' perspectives and experiences. *Perspectives in Education*, 41(4). <https://doi.org/10.38140/pie.v41i4.6702>
- [35] Mafugu, T., & Abel, S. (2022). Lecturer Support in the Implementation of a New Curriculum during the COVID-19 Pandemic. *Interchange: A Quarterly Review of Education*, 53(2), 243-259. <https://eric.ed.gov/?q=curriculum+implementation&id=EJ1336335>
- [36] Morsy, S., & Karypis, G. (2019). A Study on Curriculum Planning and Its Relationship with Graduation GPA and Time To Degree. <https://doi.org/10.1145/3303772.3303783>
- [37] Nevenglosky, E., Cale, C., & Panesar Aguilar, S. (2019). Barriers to effective curriculum implementation. *Research in Higher Education Journal*, 36(36), 1-31. <https://files.eric.ed.gov/fulltext/EJ1203958.pdf>
- [38] Niall Mulpeter, McCormack, O., & O'Flaherty, J. (2023). Purpose, focus and voice? Lessons from a curriculum development advisory committee. *Irish Educational Studies*, 1-18. <https://doi.org/10.1080/03323315.2023.2253202>
- [39] Posillico, J. J., Edwards, D. J., Roberts, C., & Shelbourn, M. (2021). Curriculum development in the higher education literature: A synthesis focusing on construction management programmes. *Industry and Higher Education*, 095042222110448. <https://doi.org/10.1177/09504222211044894>
- [40] Roozafzai, Z. S. (2024). *ResearchGate*. [https://www.researchgate.net/publication/380336706\\_Exploring\\_the\\_influence\\_of\\_cognitive\\_task\\_complexity\\_on\\_EFL\\_language\\_learning\\_and\\_curriculum\\_development](https://www.researchgate.net/publication/380336706_Exploring_the_influence_of_cognitive_task_complexity_on_EFL_language_learning_and_curriculum_development)
- [41] Rudhumbu, N., & du Plessis, Elize. (2022). The Mediating Role of Lecturer Biographic Factors on Curriculum Implementation in Universities. *International Review of Education*, 68(1), 11-31. <https://eric.ed.gov/?q=curriculum+implementation&id=EJ1336329>
- [42] Sales, J. N. R., Lu, S., Prudente, M. S., & Aguja, S. E. (2023). Evaluation of Senior High School Curriculum: Perspectives and Experiences of Students and Teachers. *International Journal of Curriculum and Instruction*, 15(1), 544-565. <https://eric.ed.gov/?id=EJ1382896>
- [43] Samson, P. (2019). PARTICIPATORY COLLABORATION: BUILDING PARTNERSHIPS IN CURRICULUM PLANNING. *PARTICIPATORY COLLABORATION: BUILDING PARTNERSHIPS IN CURRICULUM PLANNING*, 3, 127-136. <https://files.eric.ed.gov/fulltext/EJ1302476.pdf>
- [44] Sathorar, H., & Blignaut, S. (2021). A Critical Approach to Curriculum Implementation: Reflecting on Lecturer Preparedness to be Transformative Intellectuals. *Interchange*, 52(3), 415-431. <https://doi.org/10.1007/s10780-021-09437-1>
- [45] Shahidullah, K. K., & Hossain, Md. R. (2022). Designing an Integrated Undergraduate Disaster STEM Curriculum: A Cultural Shift in Higher Education Curriculum Development in Bangladesh. *Journal of Ethnic and Cultural Studies*, 9(1), 265. <https://doi.org/10.29333/ejecs/1042>

- [46] Shinno, Y., Miyakawa, T., Iwasaki, H., Kunimune, S., Mizoguchi, T., Ishii, T., & Abe, Y. (2018). Challenges in Curriculum Development for Mathematical Proof in Secondary School: Cultural Dimensions to Be Considered. *For the Learning of Mathematics*, 38(1), 26–30. <https://eric.ed.gov/?id=EJ1173553>
- [47] Solikhah, I. (2022). Revisiting the EFL Curriculum in the Outcome-Based Education Framework and Freedom to Learn Program. *Journal of Social Studies Education Research*, 13(2), 243–264. <https://eric.ed.gov/?id=EJ1355524>
- [48] State of Rhode Island. (2023, August 22). Curriculum Definition | RI Department of Education. [Ride.ri.gov](https://ride.ri.gov/instruction-assessment/curriculum/curriculum-definition). <https://ride.ri.gov/instruction-assessment/curriculum/curriculum-definition>
- [49] Thomas, Meng, H., Ching Sing Chai, King, L., Wong, S. S., & Yam, Y. (2021). Creation and Evaluation of a Pre-tertiary Artificial Intelligence (AI) Curriculum. *ArXiv* (Cornell University). <https://doi.org/10.48550/arxiv.2101.07570>
- [50] Unit 5: Curriculum Evaluation. (n.d.). [Specialeducationnotes.co.in](https://specialeducationnotes.co.in/). <https://specialeducationnotes.co.in/C13unit5.htm>
- [51] VanTassel-Baska, J., & Baska, A. (2021). *Curriculum Planning and Instructional Design for Gifted Learners*. Routledge.
- [52] Vreuls, J., Koeslag-Kreunen, M., Klink, M., Nieuwenhuis, L., & Boshuizen, H. (2022). Responsive curriculum development for professional education: Different teams, different tales. *The Curriculum Journal*, 33(4). <https://doi.org/10.1002/curj.155>
- [53] Yang, Y. (2017). Evaluation of a Curriculum. <https://doi.org/10.2991/iccessh-17.2017.43>

