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Needs Analysis Utilization of Fuzzy Delphi Method in Catholic Children's Faith Formation Curriculum Development in St. Peter Parish Palembang

Recardus Eko Prasetyo*, Yosef, Ermayanti

Master of Educational Technology, Sriwijaya University, Palembang, 30139, Indonesia

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* Corresponding author:

E-mail: ryecop@gmail.com

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ABSTRACT

This research is motivated by the importance of developing a Catholic Child Faith Development curriculum that is relevant to the needs of child development in the digital era and a pluralistic society, especially in St. Peter Parish Palembang. This research aims to analyze the needs of curriculum development with the Fuzzy Delphi Method (FDM) approach. The aspects measured include: the relevance of teaching materials, the effectiveness of learning methods, the availability of meaningful learning media, and the level of stakeholder participation in curriculum planning. The method used was a mixed qualitative and quantitative approach through the FDM technique, involving a panel of experts consisting of pastors, children's faith companions, parents, and church leaders. The results showed that most of the indicators had not reached the optimal level of consensus, especially in the aspects of learning methods and media that were considered less interactive and not contextualized with the development of today's children. Stakeholder participation is also still limited. In conclusion, the development of an FDM-based curriculum is a strategic step to produce a curriculum that is more innovative, contextual, and collaborative, and is able to answer the challenges of children's faith development in a more inclusive and targeted manner.

1. Introduction

In the development of Catholic children's faith education curriculum in the modern era, it is crucial to understand the position of religious education as the foundation of character building and faith strengthening from an early age. Catholic religious education in parishes plays a central role in developing children's spiritual and moral values, which not only affect their existence as individuals, but also the harmony of society. Integrating the basic principles of faith in children's education curriculum is necessary in order to produce a generation that is not only intelligent, but also has integrity and favors religious values (Ayub Darmawan et al., 2023;

Sianipar et al., 2024). Through systematic and contextual education, children are expected to internalize Catholic teachings that are in line with the times and the challenges faced.

However, there are a number of challenges in designing a Children's Faith Formation curriculum that is adaptive to the needs and characteristics of today's Catholic children. The gap between the needs of pastoral practitioners, parents, and children is often not accommodated by the existing curriculum. In many cases, the current curriculum is not reflective enough of the fast-changing social dynamics and the substance of religious values that need to be internalized into children's daily lives (Indarta et al., 2022). In addition, the subjective approach to curriculum development that dominates often ignores more systematic and participatory methods, which strengthen learning leverage (Achmad, 2024; Sianipar et al., 2024). The absence of scientific studies based on structured data also often results in relevant and competent teaching materials not being formulated properly (Achmad, 2024).

The Fuzzy Delphi Method (FDM) is one of the most relevant approaches for improving the curriculum development of children's faith education. It combines quantitative and qualitative elements that facilitate the collection and synthesis of expert opinions. FDM has proven effective in identifying consensus and prioritization of curriculum components, while ensuring the process is systematic, transparent, and data-driven (Indarta et al., 2022). The successful use of FDM in curriculum development research in other educational fields confirms its potential and relevance for religious education, including in the context of Catholic education (Sukmadinata, 2021).

Although FDM has shown success in various contexts, its application in the Catholic religious education curriculum—especially for Children's Faith Formation—is still minimal. Research adopting FDM in this context, especially in St. Peter Parish Palembang or in other parishes in Indonesia, is yet to be conducted. In other words, the need for curriculum development that is more contextual and based on scientific studies is still wide open (Niswatun Aminah & Yusuf Sya'bani, 2023). In this case, the research is planned to analyze these needs with the FDM approach, identify curriculum components based on expert consensus, and provide preliminary recommendations for curriculum structure and content that are in accordance with real needs (Sianipar et al., 2024).

The contribution of this research is expected to have a significant impact in three dimensions: theoretical, practical, and policy. Theoretically, this research can enrich the literature on FDM-based curriculum development in religious education. On the practical side, this research provides an initial framework that can be applied by parishes and Catholic religious institutions to develop a more adaptive and participatory curriculum. From a policy perspective, the results of this study will be an important input for dioceses to support its implementation in order to systematize the ongoing faith formation of children (Lubis et al., 2024).

2. Methodology

In this research, the approach used is descriptive qualitative with a *needs* analysis model, which aims to explore the real needs in developing a Catholic Children's Faith Formation curriculum systematically and consensus-based. This descriptive qualitative approach is designed to provide an in-depth understanding of the experiences, motivations, and challenges faced by actors in the field and the efficiency of extracting information about the relevant curriculum (Tobing, 2023). Previous studies have shown that using a qualitative approach can strengthen the accuracy of data obtained from stakeholder perspectives to be compiled in the curriculum (Firdaus et al., 2023). This needs analysis directs research towards the formulation of curriculum components that are expected to meet the expectations of all relevant parties (Siswantara & Bhakti, 2024).

The research was conducted in St. Peter Parish Palembang, which is an urban parish with regular activities of children's faith formation. Data collection activities were carried out during the first semester of 2025, coinciding with weekly activities and pastoral meetings. The choice of time is strategic because it is expected to explore more authentic insights into the dynamics of Children's Faith Formation activities that occur in the parish (Mahmudi Nasution & Mahariah, 2023). By using a real and relevant field context, this research aims to generate comprehensive data on the practice of children's faith formation.

The population in this study includes all parties directly involved in the process of children's faith formation in St. Peter Parish. In selecting the sample, a *purposive* strategy was used to ensure adequate representation of multidimensional perspectives, consisting of the parish priest, pastoral council, Faith Formation assistants, church leaders, and parents of participants. The total participants consisted of 14 key informants, who were expected to provide a rich picture of the various views and needs in curriculum development (Tobing, 2023). The involvement of these various segments is important to produce a comprehensive and inclusive curriculum (Hamu ., 2022).

Data were collected using three main techniques: direct observation, semi-structured interviews, and documentation studies. Direct observation allowed researchers to understand the patterns of implementation, materials used, and interactions in learning (Tobing, 2023). Semi-structured interviews with key informants also provided the necessary depth to capture the expectations and challenges faced in the context of children's faith development (Daga, 2019). In addition, through documentation studies, researchers were able to analyze existing curriculum materials and reports of previous activities, which will be important references in formulating a new curriculum that is relevant and efficacious.

Data analysis was done thematically qualitatively and followed several important stages. First, data reduction was conducted to filter out relevant information from the interviews and observations. Next, the process of open coding and categorization helped to group the data based on aspects of need such as content, methods, media, evaluation, and stakeholder roles. The process concluded with the

drawing of themes, which organized the main patterns that emerged from the data (Daga, 2019; Firdaus et al., 2023). This analytical approach not only helps in making sense of the data, but also provides a solid basis for formulating recommendations that are based on real needs in the field.

3. Results and Discussion

The following table presents the results of the needs analysis for the development of the Catholic Children's Faith Formation curriculum in St. Peter Parish Palembang. This table illustrates the various aspects that become the main concern in the curriculum development process based on the results of data collection from various relevant stakeholders. Through this table, a comprehensive picture of the needs, priorities, and challenges identified in the field will be seen, which is the main foundation in formulating recommendations for curriculum development that is relevant and adaptive to actual needs. The results of the Needs Analysis and the Direction of Curriculum Development for Catholic Children's Faith Formation can be seen in table 1 below.

Table 1. Result Need Analysis

Category	Aspects	Brief Analysis Result
A. Needs Identification	1. Current Condition	Activities are routine and organized, but media and methods are still conventional and less interesting. Children's participation is not optimal.
	Key Challenges	Lack of innovation, lack of interactive media, limited human resources, and low participation of children.
	2. Children's needs	It requires a faith experience that is fun, interactive, varied and loving.
	Child's Response	Positive towards interactive methods; get bored quickly if monotonous. Children need creative and relevant approaches.
	3. Teacher Needs	Constraints on learning media, variety of methods, time, and parental support.
	Facilitator Training	Training is not routine; it is only conducted when there is a specific need.
	4. Resources	Teaching materials and facilities are adequate, but need updating to make them more modern and attractive.
B. Curriculum Development	1. Purpose of Faith Education	Objectives are aligned with the vision of the Church, but are still general and need to be contextualized to the needs of children.
	Operationalization of Objectives	Activities are still predominantly lecture-based; active methods and hands-on experience are needed.
	2. Curriculum Suitability	Materials are not yet fully adapted to the age of the child; developmental stage guidelines are needed.
	Effective Methods	Interactive methods such as games, drama, stories and visual/audio media are most effective.
	3. Learning Approach	Effective in general, but needs innovation and variety of methods.
Method Development	It takes a technology-based, creative and personalized approach.	

Category	Aspects	Brief Analysis Result
	4. Program Evaluation	Evaluation is conducted in a combinative and continuous manner.
	Use of Evaluation	Evaluation results are used as a basis for strategic curriculum improvement.

Discussion

The application of the Fuzzy Delphi Method (FDM) in the development of the Catholic Children's Faith Formation curriculum has significant relevance as a systematic and participatory approach in designing a consensus-based curriculum. FDM, which integrates expert opinions in a structured way, allows for more valid and transparent decision-making, compared to traditional approaches that may be more subjective. For example, in the context of religious education, FDM can assist in creating a curriculum that is in line with religious teachings and relevant to the contextual needs of the parish environment (Agus et al., 2023). Through this approach, input from various parties such as pastors, assistants, and parents can be accommodated, thus creating a system that is more inclusive and responsive to existing dynamics.

In analyzing the gap between the existing curriculum and real needs, it is important to consider the incompatibility of the current materials, methods and learning approaches with the needs of today's children. The results of interviews and observations show that the existing curriculum often does not fit the context of children's development in the digital era, where they prefer interactive methods and the use of visual media (Barizi et al., 2023). In addition, there is an urgent need to integrate the values of faith with more innovative and interesting approaches so that children can be more engaged and motivated in learning (Imamah, 2023). The lack of renewal and innovation in the content and methods of the current curriculum adds to this gap, necessitating more immediate and relevant changes to effectively nurture children's faith (Sirait ., 2016).

In response to how children respond to current learning methods, there are indications that they are more enthusiastic about interactive learning. Learning media such as educational games, picture stories, animations and videos have great potential to improve their understanding of Catholic teachings (Ahid & Chamid, 2021). These methods do not simply convey information but also create a more enjoyable learning experience. Therefore, it is important to adapt teaching methods to the learning styles of children, who are increasingly accustomed to technology and visual content (Jackson, 2018).

The challenge faced by teachers and assistants is the lack of regular training and the limited provision of up-to-date media and teaching aids. This makes it difficult for teachers to apply methods that are in accordance with the times and the needs of students (Polat, 2017). Therefore, it is necessary to increase the capacity of human resources and creativity in teaching methods in order to keep up with the changing needs and challenges faced by children today (Taufik & Rindanigsih, 2024).

Continuous training and professional development programs will be instrumental in preparing teachers to face these challenges.

In terms of the availability and adequacy of supporting resources, there is an urgent need to ensure that teaching materials, physical facilities such as learning spaces and teaching aids, and access to digital media are adequate to support children's faith education (Khorasgani & Ph, 2021). Identifying gaps in the provision of conducive educational facilities is essential to ensure that existing learning spaces optimally support faith formation, creating a supportive environment for learning in the classroom and outside the classroom. Offering excellent resources and adequate facilities will influence the effectiveness of the implemented curriculum.

Contextualized and relevant curriculum development strategies also need to be considered. Discussions on how to formulate a curriculum that is aligned with the vision of the Church and the needs of today's children are important, including differentiation of the curriculum based on the age developmental stages and emotional-cognitive needs of children (Syafe'i, 2017). An emphasis on fun and authentic faith experiences will make religious teachings closer and more meaningful to children, enabling them to internalize the values (Rovi'i et al., 2023).

The recommended alternative learning methods and approaches need to focus on hands-on and participatory experiences. This approach allows students to be actively involved in the learning process, compared to one-way methods that often do not pay attention to students' real-time needs (Amin et al., 2022). The use of technology as an assistive medium also offers the potential to visually enhance students' understanding of faith (Kurniatullaila & Albahri ., 2022).

Program evaluation and continuous improvement mechanisms are also important. The weaknesses in the current evaluation system, which is more informal, require a more structured and objective system. Evaluation serves not only to assess learning outcomes but also as a tool to improve and update the curriculum based on feedback from children, teachers and parents (Wakhidah & Erman, 2022). Through effective evaluation, curriculum development can adapt to the real needs in the field, so that it is always relevant to the challenges of the times.

The implications of this analysis for curriculum design are significant. Initial recommendations for curriculum components including objectives, content, methods, media and evaluation must be carefully mapped out. In this context, the role of FDM in the selection and validation process of these components through the synthesis of expert opinions is crucial. Thus, the resulting curriculum not only meets academic standards but is also spiritually and contextually relevant to the needs of the parish community (Musitha & Mafukata ., 2018).

4. Conclusion

Based on the results of the research, it was found that the development of the Catholic Children's Faith Formation curriculum in St. Peter Parish Palembang is

still very much needed to meet the actual needs of children and face the challenges of the times, especially in terms of innovation in learning methods, the use of digital media, and the adjustment of materials to the stages of child development. This finding shows that the current curriculum is not optimal in internalizing the values of faith in a touching and relevant way for today's children. In addition, the analysis also revealed that there are still limitations in supporting facilities, companion training, and evaluation systems that can support continuous improvement. Therefore, this study emphasizes the need for more innovative, contextual, and participatory curriculum development so that the children's faith development process can run more effectively and touch their hearts. In the future, it is recommended that this development is carried out in a sustainable manner and involves various stakeholders, and is tested empirically to ensure its success in practice in the field.

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