



Implementation of the Kemp Model in the Development of Islamic Religious Education Teaching Materials

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ABSTRACT

Published Online: October 15, 2025

The main issue in Islamic Religious Education (PAI) learning lies in the predominance of conventional teaching materials that are not aligned with students' characteristics. This condition hinders the development of active, meaningful, and contextual learning processes. This study aims to examine the application of the Kemp model in the development of Islamic Religious Education (PAI) teaching materials through a literature review approach. The findings indicate that the Kemp model is effective in designing Islamic Religious Education (PAI) materials due to its flexible, comprehensive, and systematic nature. The model includes needs analysis, goal setting, instructional strategies, and evaluation processes that can be adjusted to various learning contexts. Previous studies also reveal that the implementation of the Kemp model enhances students' participation, understanding, and engagement in Islamic Religious Education (PAI) learning. Therefore, the Kemp model is considered a strategic alternative for developing Islamic Religious Education (PAI) materials that are relevant to curriculum demands and students' developmental needs.

KEYWORDS:

Instructional Material Development, Islamic Religious Education (PAI), Kemp Instructional Design Model

I. INTRODUCTION

Islamic Religious Education (PAI) plays a vital role in shaping students' character to become individuals who are faithful, pious, and morally upright (Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional, 2003). The development of high-quality and contextually relevant teaching materials is therefore a fundamental necessity to ensure that the goals of PAI learning are effectively and holistically achieved across various educational levels (Astuti, Vianty, & Sriwijaya, 2024). Teaching materials that are well structured, systematic, and context-sensitive enable educators not only to deliver content efficiently but also to cultivate students' independence in learning, foster reflective and critical thinking, and encourage the comprehensive attainment of cognitive, affective, and psychomotor competencies (Supardi, 2020).

Practices in current classroom, a large proportion of PAI teachers continue to depend on conventional teaching

materials that fail to align with students' diverse characteristics, backgrounds, and learning needs. This tendency often leads to learning environments that are less engaging, less meaningful, and limited in promoting students' active participation (Astuti et al., 2024). One of the underlying factors contributing to this situation is the limited understanding among teachers regarding practical and effective models of teaching material development that can be implemented within contemporary educational settings (Hidayat & Tarsono, 2021).

The continuous evolution of curriculum frameworks and educational technology demands that teachers become more creative, adaptive, and systematic in designing learning materials that reflect both pedagogical and technological integration. Islamic Religious Education, which has often been perceived merely as a subject focusing on memorization and normative doctrines, requires innovative learning designs that contextualize Islamic values in real-life experiences and promote students' active engagement. The Kemp instructional design model provides a potential solution to these challenges, offering a comprehensive and flexible framework that integrates all components of the instructional process from the identification of needs to the evaluation stage while allowing adjustments based on learners'

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**Cite this Article: Danar Wijokongko, Moh. Nurhakim (2025). Implementation of the Kemp Model in the Development of Islamic Religious Education Teaching Materials. International Journal of Social Science and Education Research Studies, 5(10), 957-963*

characteristics, educational goals, and contextual realities (Reksiana, 2022).

As an instructional framework, the Kemp model emphasizes flexibility, learner orientation, and systematic design principles that can be applied across different educational contexts. This study examines the implementation of the Kemp model in the development of Islamic Religious Education (PAI) teaching materials through an analytical literature review. The discussion is expected to contribute theoretically by enriching the discourse on instructional design models and practically by providing educators with a structured yet adaptable framework for developing effective, contextual, and student-centered PAI learning materials suitable for the demands of modern education.

II. RESULTS

Definition Of Teaching Materials

Teaching materials represent one of the essential components that determine the quality of learning in contemporary education. These materials serve as the embodiment of curriculum content, consisting of facts, concepts, procedures, and problems that must be conveyed to students as part of the instructional process (Hernawan, Permasih, & Dewi, 2012). According to Supardi (2020), teaching materials are characterized by four primary indicators: completeness, systematic structure, uniqueness, and specificity. They may take the form of books, audio recordings, videos, or computer-based resources designed to facilitate and enrich the learning process. The principal function of teaching materials is to enhance students' understanding of learning content, provide opportunities for independent study, and support the achievement of instructional objectives (Hernawan et al., 2012)

The preparation of teaching materials aims to simplify the learning process and improve students' comprehension of the subject matter, positioning these materials as one of the key sources of learning. Learning resources can be categorized based on their origin and nature (Yuberti, 2018), including:

1. **Messages**, referring to information transmitted in the form of ideas, concepts, facts, or data.
2. **People**, referring to individuals who act as managers, repositories, and distributors of information.
3. **Software**, referring to digital content or programs containing instructional information.
4. **Hardware**, referring to physical tools or devices used to deliver information within the learning process.
5. **Techniques**, referring to specific procedures or methods employed in utilizing materials, tools, or environments to convey information
6. **Settings**, referring to the learning environment where the exchange of information occurs.

These categories illustrate that educators themselves can serve as a learning resource, similar to teaching materials. Historically, teachers functioned as the sole source of learning, but the emergence of teaching materials has transformed their role into facilitators, developers, and managers of instructional resources (Nasution et al., 2017). The existence of teaching materials has shifted the role of educators, who were once the sole source of learning, into facilitators of instruction as well as developers and managers of learning resources. Teaching materials are generally categorized into two main types, namely printed and non-printed materials. The classification of these teaching materials is explained as follows:

1. Printed Teaching Materials

Printed teaching materials refer to learning content presented in physical form, such as textbooks, handouts, and student worksheets (Supardi, 2020). These materials are designed to support the learning process by providing structured information that can be easily accessed and understood by students. A major advantage of printed teaching materials lies in their independence from technological tools, allowing learners in regions with limited access to digital infrastructure to use them effectively. Printed resources also enable students to make notes, highlight key ideas, and review information repeatedly at their own pace, which enhances retention and comprehension. Despite these advantages, printed teaching materials have certain limitations, particularly the absence of direct feedback or interactive elements that might help clarify students' understanding. Learners who rely solely on printed materials may face difficulties when they encounter complex concepts without additional guidance or explanation from teachers. Continuous improvement and the integration of visual aids, clear explanations, and contextual examples are therefore essential to ensure printed materials remain relevant and effective in contemporary learning environments (Waraulia, 2020).

2. Non-Printed Teaching Materials

Non-printed teaching materials include learning media such as audio programs, display materials, models, overhead transparencies (OHT), videos, and computer-assisted instructional resources (Supardi, 2020). These materials strongly support active and independent learning approaches because they provide multisensory experiences for students (Yuberti, 2018). The variety of media

allows learners to observe, listen, and interact with content, which can enhance understanding and engagement during the learning process. Such materials, however, cannot always be utilized in certain regions that still lack access to adequate technology and digital infrastructure.

The continuous development of technology and the increasing demands of the education sector require academics to adopt effective methods for improving the quality of education. One of the essential efforts to achieve this is through the development of teaching materials. The process of developing such materials must be based on the suitability of the environment and technology (Nasution et al., 2017) as well as on the psychological needs and developmental stages of learners (Yuberti, 2018). This concept aligns with the theory of andragogy, which assumes that learning should be grounded in several key aspects: (1) the need to understand something, (2) autonomy in learning decisions, (3) the use of experience as a learning resource, (4) readiness to learn, (5) learning orientation, and (6) internal motivation (Merriam & Bierema, 2014).

The development of teaching materials must take several important aspects into account to ensure that the materials are appropriate, relevant, and can be effectively used in the learning process. Several key considerations in developing teaching materials include the relevance between content, media, format, and learners' needs (Mahulae, 2016). In his book *Landasan Pengembangan Bahan Ajar* (Supardi, 2020) it is explained that the development of teaching materials should be based on several fundamental principles, namely:

1. Philosophical Principle

Teaching materials must be consistent with the fundamental values of education such as humanity, justice, and truth. Within the educational context, this principle also includes the integration of ideological values and noble morals as the foundation for developing students' character.

2. Psychological Principle

This principle relates to understanding learners' characteristics, needs, and developmental stages. Teaching materials must stimulate interest in learning, correspond to students' abilities, and support the balanced growth of cognitive, affective, and psychomotor domains.

3. Pedagogical Principle

Teaching materials must be developed in accordance with learning objectives, the existing curriculum, and the principles of active learning. Well-structured materials should serve as a bridge for achieving basic competencies and facilitate meaningful learning experiences.

4. Linguistic Principle

The language used in teaching materials must be communicative, adjusted to students' developmental levels, and expressed clearly and precisely. Proper language use makes the material easier to understand and prevents misinterpretation of meaning.

These four principles form the foundation for creating teaching materials that are not only informative but also educational, contextual, and communicative. With careful consideration of these aspects, teaching materials can be utilized optimally to support effective learning outcomes. Several models can be used in the development of teaching materials, depending on the needs, methods, and objectives of the educator as the developer. In *Landasan Pengembangan Bahan Ajar*, Supardi (Supardi, 2020) categorizes nine models of teaching material development, each with its own purpose and sequence of stages, namely:

1. Borg and Gall Model

This model represents a commonly used research and development (R&D) approach designed to produce valid and tested educational products. It is suitable for developing research-based instructional materials. The stages include preliminary research, planning, initial product development, preliminary field testing, revision of the initial product, main field testing, operational product revision, operational testing, final revision, and dissemination and implementation.

2. Dick and Carey Model

This model integrates various components of learning into an instructional system. It is appropriate for developing competency-based materials that emphasize learning outcomes and evaluation. The process includes identifying instructional goals, conducting learning analysis, analyzing learners and contexts, formulating specific learning objectives, developing evaluation instruments, designing instructional strategies, developing and selecting learning materials, conducting formative evaluation, revising, and performing summative evaluation.

3. Kemp Model

The Kemp model offers a flexible and non-linear framework. During the development process, educators can begin from any component depending on their specific needs. It is particularly well-suited for developing contextual-based teaching materials. The main components include identifying learning problems, analyzing learner characteristics, conducting task analysis, determining specific learning objectives, organizing instructional content, designing

learning strategies, planning message delivery, developing learning activities, and conducting evaluation.

4. ASSURE Model

This model emphasizes the use of media and technology in the learning process. The term ASSURE represents the sequential stages of development: Analyze learners, State objectives, Select media and materials, Utilize media, Require learner participation, and Evaluate and revise. It is effective for developing digital and interactive teaching materials.

5. ADDIE Model

ADDIE is one of the most common and systematic models for designing learning materials. It is particularly effective in the development of instructional media. The stages include Analysis, Design, Development, Implementation, and Evaluation.

6. PPSI Model (Instructional System Development Procedure)

Developed by Indonesian education experts, this model prioritizes systematic procedures for designing teaching materials based on instructional units. The stages include determining competencies, setting indicators, selecting content, defining methods, designing evaluation, preparing lesson scenarios, conducting learning, evaluating processes, and revising instruction.

7. MPI Model (Instructional Development Model)

This model combines design-oriented approaches with practical implementation in the field. It responds to learners’ specific needs and is particularly suitable for vocational or practice-based education. The stages consist of needs analysis, instructional planning, material development, process evaluation, and follow-up refinement.

8. 4D (Four-D Model)

The Four-D model involves four development stages: Define, Design, Develop, and Disseminate. It is frequently used for designing educational products such as learning modules or instructional media because of its systematic and concise structure.

9. Hanafin dan Peck Model

This model is simple and practical, focusing mainly on continuous evaluation and needs analysis. It includes three stages: needs assessment and goal identification, instructional design, and evaluation with revision.

Based on the diversity of these development models, this paper focuses particularly on the

application of the Kemp Model in the context of Islamic Religious Education (PAI).

III. DISCUSSION

Implementation Of The Kemp Model

(Supardi, 2020) explains that the Kemp Model is one of the instructional design models that emphasizes a comprehensive, flexible, and learner-oriented approach. The purpose of this model is to address learning problems, improve learning outcomes, and make the learning process more effective, efficient, and easier to understand. The Kemp Model consists of nine stages in its implementation, which are illustrated in the following diagram:

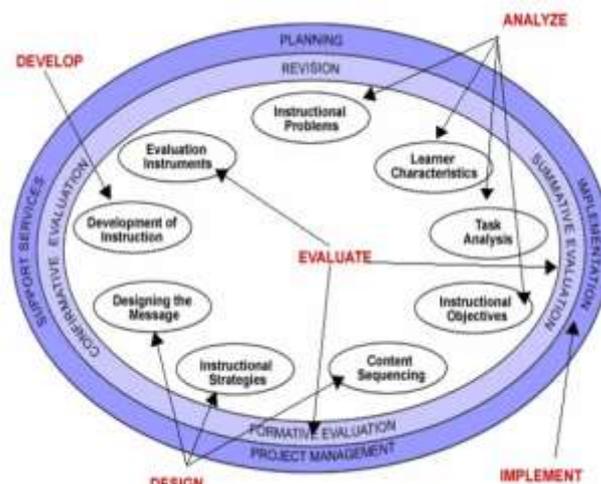


Figure 1. Kemp Model Diagram

The diagram shows that the Kemp Model applies a cyclical system, indicating that the development process in this model can begin at any point according to the developer’s needs. This characteristic makes the Kemp Model distinctive, as educators can initiate the process based on the identified problems within the learning context. The flexibility of the model allows adaptation to diverse instructional situations, although such flexibility may sometimes pose challenges for developers in determining where and how to begin the process effectively.

The Kemp Model is widely recognized as a flexible and systematic instructional design framework. Developed by Jerrold Kemp and his colleagues, it is often applied in educational planning, including within Islamic Religious Education (PAI). Several studies have demonstrated the model’s effectiveness in enhancing the design and implementation of PAI teaching materials. (Hidayat & Tarsono, 2021) in *Jurnal Inovasi Pendidikan Agama Islam (JIPAI)*, found that applying the Kemp Model combined with the Cooperative Learning STAD approach in Fiqh instruction increased students’ active participation, clarified the flow of learning, and fostered a collaborative and meaningful

learning environment. Their study also revealed that teachers who applied the Kemp Model benefited from a structured yet adaptable framework that supports value-based and contextual learning design.

(Reksiana, 2022) in *Alim: Journal of Islamic Education*, emphasized that the Kemp Model is highly effective in the development of teaching materials across various educational levels, from primary education to higher education. The study noted that the Kemp Model could be integrated with both descriptive and quasi-experimental approaches, making it versatile in addressing diverse research and instructional needs. Educators who apply the Kemp Model tend to be more structured in planning, more adaptive to classroom dynamics, and more capable of producing teaching materials that meet learners' needs and characteristics.

The findings of these previous studies indicate that the Kemp Model can be effectively applied in the development of Islamic Religious Education (PAI) teaching materials. Based on the stages described in the model, the process of developing PAI teaching materials can be implemented through the following steps:

1. Analysis of Learning Problems

Educators are expected to clearly understand the problems that occur during the learning process. One of the ways to apply this step is by identifying the causes of students' inactivity, lack of understanding of the material, and inability to apply knowledge in daily life. Once these learning problems have been identified, the next step is to analyze their root causes and determine the appropriate solutions before proceeding to the following stage of the development process.

2. Analysis of Learner Characteristics

Each student possesses unique characteristics influenced by environmental factors, learning motivation, as well as social and economic conditions. Teachers are required to understand these differences to ensure that the learning process runs effectively and inclusively. A proper understanding of learner characteristics allows teachers to select suitable teaching materials and determine instructional methods that correspond to students' needs and learning styles. When teachers are aware of their students' individual traits, they can design lessons that are more engaging, relevant, and aligned with the learners' developmental stages.

3. Task Analysis

The provision of assignments functions as a stage for identifying the level of students' understanding throughout the learning process. Conducting task analysis helps teachers obtain optimal results by recognizing varying levels of comprehension

among students with different characteristics. Within Islamic Religious Education (PAI), for instance, teachers must determine whether a particular subject requires practical activities, value-based discussions, or textual studies of scriptural sources. Task analysis ensures that learning activities are designed to meet instructional goals while accommodating diverse learning abilities.

4. Formulation of Specific Learning Objectives

This stage focuses on determining the expected learning outcomes for students in each topic covered. The overall goal of Islamic Religious Education (PAI) is to nurture spiritual character, which can be strengthened through specific learning objectives aligned with that purpose. In PAI, learning objectives go beyond the mastery of cognitive knowledge and include affective and psychomotor aspects that contribute to the formation of Islamic values and behaviors. Based on these objectives, the PAI curriculum generally encompasses five areas: *Aqidah* (creed), *Akhlaq* (morality), *Fiqh* (Islamic jurisprudence), *History*, and *Al-Qur'an and Hadith*. Each category has distinct targets, and every subtopic is designed with measurable learning outcomes.

5. Preparation of Teaching Materials

Once the preceding stages have been analyzed, the preparation of teaching materials can begin. Teaching materials must be designed based on the outcomes of the previous analyses to ensure the learning process runs effectively. As previously stated, teaching materials play a central role as learning resources for students. The preparation process involves selecting relevant content, organizing the sequence of presentation, and including examples or illustrations that support comprehension. In the context of PAI, teaching materials should also integrate Islamic values that are practical and applicable in daily life. Well-prepared materials act as a bridge between theory and practice, helping students connect knowledge with real experiences.

6. Design of Learning Strategies

Once the teaching materials have been properly prepared, teachers need to plan strategies for delivering them effectively. A learning strategy consists of the methods, media, and activities that facilitate students' understanding of the subject matter. For example, in a PAI lesson on *wudu* (ablution), teachers may organize discussions on the health benefits of cleanliness and demonstrate the proper procedure through videos or visual media. Carefully designed learning strategies

ensure that the materials are not only understood cognitively but also internalized as values and daily practices.

7. Planning of Message Delivery

This stage requires teachers to plan how the instructional content will be communicated to students clearly, systematically, and meaningfully. The process includes selecting an appropriate language style, organizing the media used whether audio, visual, printed, or digital and planning the interaction between teacher and students. The messages contained in PAI teaching materials should not only convey information but also aim to shape emotional, spiritual, and moral awareness. For instance, when presenting stories of the Prophets, teachers should design them in ways that inspire students to reflect on the moral lessons embedded in those narratives.

8. Learning Development

Learning development involves compiling and refining all instructional tools and media to be used during teaching activities. This process includes developing modules, student worksheets, videos, and interactive media, as well as designing formative assessments. At this stage, teaching materials are no longer in draft form but are ready to be tested in real classroom settings. Within the context of PAI, this may include the creation of Islamic etiquette booklets, prayer guides, or digital applications containing interactive quizzes on religious knowledge and practice.

9. Evaluation

Evaluation serves as the final stage in determining the quality of the designed teaching materials and the effectiveness of the learning process. This stage assesses the extent to which learning objectives have been achieved and how well the materials assist students in understanding the lessons. Evaluation can be conducted through formative assessments, self-reflection activities, interviews, or direct feedback gathered during the learning process. The results of evaluation are essential for continuous improvement, ensuring that the developed materials remain relevant, meaningful, and capable of enhancing learning outcomes in Islamic Religious Education (PAI).

IV. CONCLUSION

The development of Islamic Religious Education (PAI) teaching materials requires a systematic and flexible approach to effectively address the challenges of contemporary learning. The Kemp Model offers a comprehensive and adaptive framework that assists educators in creating instructional materials suited to students' needs

and learning contexts. Based on the literature reviewed, the Kemp Model has proven relevant and effective in improving both the quality of teaching materials and the overall learning process in PAI. The model's structured yet flexible design allows educators to adjust each stage of development according to specific educational goals and learner characteristics. Consequently, teachers and curriculum developers in the field of Islamic Religious Education are encouraged to adopt the Kemp Model as a strategic alternative for designing teaching materials that are contextual, engaging, and aligned with students' developmental needs and current curricular demands.

REFERENCES

1. Astuti, S. P., Vianty, M., & Sriwijaya, U. (2024). Pengembangan Bahan Ajar Bermuatan Kearifan Lokal Berbasis Fliphtml5 Materi Descriptive Text di SMP Negeri 2 Lahat : Sebuah Analisis Kebutuhan, 4, 1440–1448.
2. Hernawan, A. H., Permasih, & Dewi, L. (2012). Pengembangan Bahan Ajar Tematik. *Direktorat UPI Bandung*, 1489–1497. Retrieved from http://file.upi.edu/Direktori/FIP/JUR._KURIKULUM_DAN_TEK._PENDIDIKAN/194601291981012-PERMASIH/PENGEMBANGAN_BAHAN_AJAR.pdf
3. Hidayat, E. S., & Tarsono, T. (2021). Penerapan Desain Instruksional Model Kemp Berbasis Kooperatif Learning Stad Pada Materi Fiqih. *Jurnal Inovasi Pendidikan Agama Islam (JIPAI)*, 1(1), 12–27. <https://doi.org/10.15575/jipai.v1i1.10995>
4. Mahulae, P. S. (2016). Pengembangan Bahan Ajar, 1–23.
5. Merriam, S. B., & Bierema, L. L. (2014). *Adult Learning: Linking Theory and Practice*, 6.
6. Nasution, S., Afrianto, H., NURFADILLAH SALAM, S. & J., Nim, N., Sadjati, I. M., Agent, S. G., ... Aceh, D. (2017). Berbagai Pendekatan dalam Proses Belajar dan Mengajar. *Pendidikan*, 3(1), 1–62. <https://doi.org/10.1017/CBO9781107415324.004>
7. Reksiana. (2022). Pengembangan Desain Model Kemp dalam Pembelajaran. *Alim Jurnal Islamic Education*, 4(1), 105–124.
8. Supardi. (2020). *Landasan Pengembangan Bahan Ajar*. Retrieved from https://books.google.co.id/books?id=orQPEAAAQBAJ&printsec=frontcover&dq=BAHAN+AJAR&hl=jv&sa=X&ved=2ahUKEwie783e8azwAhWWaCsKHZ51AikQ6AEwAXoECAAQAg#v=onepage&q=BAHAN_AJAR&f=false
9. Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional, Sistem Pendidikan Nasional § (2003).

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10. Waraulia, A. M. (2020). Bahan Ajar Teori dan Prosedur Penyusunan. *UNIPMA Press*, 1–59.
11. Yuberti. (2018). *Teori Pembelajaran dan Pengembangan Bahan Ajar dalam Pendidikan. Psikologi Pendidikan* (Vol. 1).