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Assisting Teachers in Developing Qirā'ah Learning Materials Based on Message Design Principles

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Abstract

The teaching of Qirā'ah (Arabic reading comprehension) at STAI Darul Ulum Banyuanyar Pamekasan has long faced challenges due to the use of monotonous and text-heavy learning materials. The existing textbooks consist mainly of reading passages and simple exercises that fail to attract students' interest or encourage autonomous learning beyond the classroom. This community service project aimed to assist Arabic language teachers in developing Qirā'ah learning materials based on message design principles, emphasizing clarity, visual appeal, and pedagogical effectiveness. A participatory mentoring approach was employed, involving workshops, collaborative material design, and expert validation led by Dr. Jiddah Hassan Muhammad from the University of

Maiduguri, Nigeria. Data were collected through observation, documentation, and focus group discussions, and analyzed qualitatively using Miles and Huberman's interactive model. The findings revealed significant improvement in teachers' ability to integrate design elements and semiotic principles – particularly Peirce's triadic model of icon, index, and symbol – into their instructional materials. The newly developed Qirā'ah resources showed increased visual coherence and motivational value, resulting in greater student engagement and comprehension. The mentoring process also fostered cross-cultural academic collaboration, enhancing pedagogical insight and professional competence among participating teachers. This project contributes to Arabic education by demonstrating how message design theory and semiotics can be effectively applied to religious and linguistic learning contexts, bridging the gap between traditional textual instruction and modern educational design.

Keywords: Qirā'ah, message design, Arabic language teaching, semiotics, teacher mentoring, material development

Abstrak

Pembelajaran Qirā'ah (pemahaman bacaan bahasa Arab) di STAI Darul Ulum Banyuwangi Pamekasan selama ini menghadapi tantangan serius karena bahan ajar yang monoton dan kurang menarik. Buku yang digunakan hanya berisi teks bacaan dan latihan-latihan sederhana tanpa elemen visual atau desain yang mampu menarik minat mahasiswa untuk belajar secara mandiri di luar kelas. Kegiatan pengabdian kepada masyarakat ini bertujuan untuk mendampingi dosen dan guru bahasa Arab dalam mengembangkan bahan ajar Qirā'ah berbasis prinsip desain pesan yang menekankan kejelasan, daya tarik visual, dan efektivitas pedagogis. Pendekatan pendampingan partisipatif digunakan melalui lokakarya, kolaborasi desain bahan ajar, dan validasi ahli yang melibatkan Dr. Jiddah Hassan Muhammad dari University of Maiduguri, Nigeria. Data dikumpulkan melalui observasi, dokumentasi, dan diskusi kelompok terarah, kemudian dianalisis secara kualitatif dengan model interaktif Miles dan Huberman. Hasil kegiatan menunjukkan peningkatan signifikan dalam kemampuan guru mengintegrasikan elemen desain dan prinsip semiotik – khususnya model triadik Peirce: ikon, indeks, dan simbol – ke dalam bahan ajar. Produk bahan ajar yang dihasilkan menjadi lebih menarik secara visual dan lebih memotivasi mahasiswa dalam memahami teks bacaan Arab. Selain itu, proses pendampingan memperkuat kolaborasi akademik lintas budaya dan meningkatkan kompetensi profesional para pendidik. Kegiatan ini memberikan kontribusi penting bagi pengajaran bahasa Arab dengan menunjukkan bagaimana teori message design dan semiotik dapat diterapkan secara efektif dalam konteks pembelajaran keagamaan dan kebahasaaraban.

Kata kunci: Qirā'ah, desain pesan, pengajaran bahasa Arab, semiotika, pendampingan guru, pengembangan bahan ajar.

Introduction

Teaching Qirā'ah—or Arabic reading comprehension—plays a vital role in developing students' linguistic and cognitive abilities within Arabic language education programs. However, the teaching process often encounters challenges related to students' motivation and material quality. At STAI Darul Ulum Banyuanyar Pamekasan, the existing Qirā'ah materials are still presented in a conventional format, consisting merely of reading texts and repetitive exercises without engaging design or contextual relevance. This traditional approach causes students to perceive reading lessons as tedious, reducing their interest in learning outside the classroom (Al-Farisi, 2021).

The researcher's main concern emerged from classroom observations showing that students engage passively with Qirā'ah materials. Many learners report that the textbooks are too textual and lack visual or communicative appeal. Consequently, reading lessons fail to stimulate curiosity or encourage autonomous learning. Teachers

themselves acknowledge the need for creative intervention to redesign materials that are both linguistically accurate and pedagogically attractive (Rahman & Nurdin, 2022).

Previous studies have consistently emphasized that well-designed learning materials significantly improve student motivation and comprehension outcomes. Instructional design theories, particularly message design principles, suggest that the organization, clarity, and visualization of content can enhance learner engagement and retention (Morrison, Ross, & Kemp, 2019). These principles stress the importance of designing educational messages—both textual and visual—so that they effectively convey meaning and sustain attention (Reigeluth & Carr-Chellman, 2009).

In the context of Arabic education, several researchers have explored material development using technological or communicative approaches. For instance, Hamdan (2020) found that using multimedia-based Qirā'ah

materials increased comprehension among university students. Similarly, Al-Ajmi and Hassan (2021) demonstrated that integrating contextual visuals and task-based reading improved students' vocabulary retention and interpretive skills. However, these studies rarely address the systematic application of message design in Arabic reading materials.

The existing Qirā'ah textbooks at STAI Darul Ulum are designed with minimal attention to visual hierarchy, layout, and content sequencing. Most pages contain dense text, lack clear subheadings, and offer uniform question formats, leading to cognitive overload and learner disengagement. Students thus struggle to connect the reading materials with their daily experiences or broader linguistic skills (Mahmoud & Idris, 2020). Such conditions underscore a pressing need for an instructional redesign process that aligns with message design principles.

The gap identified in the literature and in classroom practice lies in the absence of teacher capacity

to develop Qirā'ah materials through a structured design framework. Teachers typically possess rich linguistic knowledge but lack training in instructional and visual design. This mismatch results in materials that are academically sound but pedagogically ineffective (Hamdani, 2021). Therefore, capacity building and practical mentoring are essential to help teachers produce appealing, well-structured, and purposeful reading materials.

The novelty of this community service program lies in its integration of message design principles—traditionally used in instructional technology—into Arabic reading material development. Unlike previous interventions focusing solely on content enrichment or digitalization, this initiative emphasizes how messages are visually and textually structured to optimize comprehension. This combination introduces a new pedagogical perspective in Arabic education, especially in local higher institutions

such as STAI Darul Ulum (Clark & Mayer, 2016).

Moreover, applying message design principles ensures that Qirā'ah materials do not merely deliver linguistic information but also convey meaning through well-organized visual and textual cues. Students can easily identify key ideas, follow logical progression, and engage in reflective reading. This design approach supports dual coding—the integration of verbal and visual information—which is proven to enhance long-term retention (Paivio, 2014).

In response to the identified challenges, this community service program was designed to assist teachers at STAI Darul Ulum Banyuanyar Pamekasan in developing Qirā'ah learning materials based on message design. Through mentoring sessions, workshops, and collaborative practice, teachers are guided to analyze learner needs, plan instructional messages, and produce engaging materials tailored to their students' levels. This participatory

approach ensures sustainability and ownership among teachers.

Therefore, the main objective of this project is to empower Arabic language educators to design effective and attractive Qirā'ah materials that foster student engagement and comprehension. By applying message design principles, this initiative aims not only to improve material quality but also to strengthen teachers' professional competence in instructional design. Ultimately, this effort contributes to enhancing the overall quality of Arabic language learning at local Islamic higher education institutions in Indonesia..

Method

This community service project employed a participatory and developmental approach, emphasizing collaboration between researchers and teachers throughout the process of material development. The participatory approach was chosen to ensure that teachers were not merely recipients of training but active contributors in designing their own Qirā'ah materials (Stringer,

2014). This aligns with the principle of empowerment-based service learning, which seeks to enhance teachers' autonomy and reflective practice (Bringle & Hatcher, 2011). The program was implemented over three months at STAI Darul Ulum Banyuanyar Pamekasan, involving five Qirā'ah instructors as participants.

The method used in this program was the training and mentoring model, consisting of three major stages: (a) needs assessment and analysis of existing Qirā'ah materials, (b) workshops on message design principles and instructional writing, and (c) mentoring and product evaluation. During the workshops, participants were introduced to theoretical frameworks of message design, including clarity, consistency, emphasis, and visual hierarchy (Morrison, Ross, & Kemp, 2019). The mentoring stage involved continuous feedback and peer review, enabling teachers to refine their designed materials based on pedagogical and aesthetic criteria (Clark & Mayer, 2016).

Several techniques were applied to collect data and evaluate the program's effectiveness. These included direct observation, semi-structured interviews, document analysis, and participant reflection sheets. Observations focused on teacher participation and collaboration during training sessions, while interviews were conducted to capture their perceptions of the design process and learning outcomes (Creswell & Poth, 2018). The documents analyzed comprised drafts of Qirā'ah materials before and after mentoring, allowing for comparison in structure, content, and design improvement.

The data sources consisted of teachers' written materials, field notes, and reflection journals, which were analyzed using qualitative descriptive analysis. Data analysis followed three main steps: data reduction, data display, and conclusion drawing (Miles, Huberman, & Saldaña, 2014). The researchers identified emerging themes related to teachers' understanding of message design,

creativity in content organization, and improvement in visual presentation. The findings were then synthesized to formulate best practices and recommendations for future Qirā'ah material development within similar educational settings.

Result and Discussion

Implementation Process and Teacher Engagement

The implementation of the community service program began with a collaborative diagnostic session involving teachers, researchers, and the invited expert, Dr. Jiddah Hassan Muhammad from the University of Maiduguri, Nigeria. His expertise in Arabic pedagogy and instructional design played a crucial role in validating the project framework and guiding the teachers' design process. The first phase focused on identifying the weaknesses of the existing Qirā'ah materials used at STAI Darul Ulum Banyuanyar, which were dominated by linear texts and lacked visual and communicative appeal (Muhammad, 2023).

Through observation and focus group discussions, it was revealed that most Qirā'ah textbooks consisted of unillustrated reading passages and monotonous comprehension questions. Students reportedly felt disengaged and rarely studied beyond classroom activities. This confirmed the need for integrating message design principles to improve material readability and attractiveness (Clark & Mayer, 2016). Dr. Muhammad validated the initial diagnosis and suggested adapting key design principles such as balance, emphasis, and contrast to stimulate visual attention and comprehension.

During the mentoring phase, the participating teachers were introduced to the core framework of message design, focusing on three elements: (a) textual organization, (b) visual structure, and (c) message clarity. Under Dr. Muhammad's supervision, teachers learned to map their learning objectives with corresponding visual and linguistic elements. This activity promoted reflective practice and encouraged teachers to view instructional design

as a systematic process rather than a spontaneous task (Morrison, Ross, & Kemp, 2019).

Teacher engagement significantly increased as the sessions progressed. They actively discussed how layout and typography could support comprehension, particularly for abstract Arabic texts. Collaborative workshops led by Dr. Muhammad demonstrated how alignment, color usage, and image-text integration could enhance learners' focus. This aligns with previous research showing that visual cues and structural coherence improve students' information retention and motivation in language learning (Mayer, 2017).

The mentoring process also revealed a shift in teachers' perceptions. Initially, they considered material design as a secondary aspect, focusing more on grammatical accuracy and text selection. However, after applying the message design model, they began to view design as an essential pedagogical tool. Teachers reported greater confidence in producing

creative materials that matched their learners' needs and classroom contexts (Ahmad, 2021).

Another important aspect was the cross-cultural insight shared by Dr. Muhammad. He emphasized that while Arabic pedagogy in Nigeria and Indonesia differs in context, both regions face similar issues of student disengagement and lack of contextualized materials. His mentorship therefore not only validated the design framework but also broadened the teachers' intercultural understanding of Arabic education (Muhammad, 2023).

Material Improvement and Analytical Findings

The second phase of this project involved developing and analyzing the newly designed Qirā'ah materials. Teachers produced prototypes containing thematic reading passages enriched with visuals, short dialogues, and reflective tasks. Compared to the old materials, the new designs demonstrated significant improvement in layout clarity, message consistency, and alignment

between content and learning goals (Rahman & Nurdin, 2022).

The validation process conducted by Dr. Muhammad and the local research team applied three analytical dimensions: (1) content accuracy, (2) design effectiveness, and (3) learner engagement potential. Using these criteria, each teacher's material was reviewed and scored qualitatively. Dr. Muhammad highlighted that while all participants succeeded in improving layout and organization, some still needed guidance on balancing textual density with visual space (Muhammad, 2023).

Qualitative data from interviews and observations revealed that students responded positively to the redesigned materials. They reported increased interest in reading activities and found the visuals helpful in understanding new vocabulary and sentence structures. This finding supports Mayer's multimedia learning theory, which states that combining verbal and visual information enhances

comprehension and recall (Mayer, 2017).

Figure 1: Inserting the Message Design



From a pedagogical standpoint, the project demonstrated how message design could bridge the gap between linguistic content and learner motivation. Teachers learned to articulate intended messages through structured layout and visual logic, ensuring that form supported meaning. This reflects Reigeluth's (2009) principle that instructional design must integrate

communication theory to maximize learning effectiveness.

The post-intervention analysis also showed improvement in teachers' awareness of instructional communication. They began to consider how visual hierarchy directs student attention and how message sequencing affects cognitive processing. Dr. Muhammad underscored that message design is not merely about aesthetics but about cognitive alignment—ensuring that learners receive, process, and interpret information effectively (Muhammad, 2023).

A key analytical insight was that teachers' creativity expanded after repeated feedback cycles. The mentoring model encouraged iterative revision, where teachers modified their drafts based on expert input and peer discussion. This aligns with the principles of design-based learning that emphasize cyclical evaluation and reflection (Laurillard, 2012). Teachers demonstrated growing skill in combining textual coherence, visual balance, and pedagogical objectives.

In addition, the analysis revealed that message design principles contributed to better comprehension outcomes. Informal classroom observations indicated that students retained key ideas more effectively when exposed to visually structured materials. This supports Paivio's (2014) dual coding theory, which explains how visual and verbal representations interact to strengthen memory pathways.

The collaboration with Dr. Muhammad further enriched the analytical framework by introducing global standards of Arabic instructional design. His validation ensured that the final materials met both linguistic accuracy and design coherence, creating a balance between traditional Qirā'ah pedagogy and modern instructional approaches. The local teachers benefited from this mentorship, gaining both technical skills and international exposure (Muhammad, 2023).

Overall, the results indicate that the program successfully achieved its objectives: (a) improving teacher competence in

designing Qirā'ah materials, (b) enhancing material quality through message design principles, and (c) fostering intercultural collaboration in Arabic education. The findings demonstrate that empowering teachers through structured mentorship and design-based training can transform the quality of Arabic reading instruction, making it more engaging, effective, and sustainable (Bringle & Hatcher, 2011; Morrison et al., 2019).

Semiotic Dimensions in Message Design: Applying Peirce's Icon, Index, and Symbol Theory

In the final stage of the mentoring process, the integration of Charles Sanders Peirce's semiotic theory became a central analytical framework. Peirce (1955) proposed that every sign conveys meaning through three interrelated modes: icon, index, and symbol. This triadic relationship proved highly relevant for Qirā'ah material design, as Arabic reading comprehension requires not only linguistic understanding but also semiotic interpretation of visuals, contexts,

and cultural cues. Under the guidance of Dr. Jiddah Hassan Muhammad, teachers learned how to align textual meaning with appropriate signs to enhance students' interpretive engagement.

The iconic element in the newly designed Qirā'ah materials referred to direct visual representations—such as images, diagrams, and illustrations—that resembled the real-world concepts being discussed in the text. For example, a reading passage about “Al-Sūq al-‘Arabī” (the Arabic market) was accompanied by contextual illustrations of traditional market scenes. These icons helped students visualize vocabulary meanings, reducing abstractness and enhancing semantic recall (Peirce, 1998; Mayer, 2017). Teachers reported that students more easily understood descriptive texts when visuals resembled familiar environments.

The indexical aspect, according to Peirce's classification, functioned as a bridge connecting textual signs with their contextual indicators. In this program, indexical

elements appeared through arrows, color codes, and layout sequences that guided the reader's attention from one concept to another. For instance, in comprehension exercises, directional arrows linked key terms with relevant explanations or images, signaling relationships between text components (Chandler, 2017). These indices guided learners cognitively and reduced misinterpretation of linguistic structures in Arabic sentences.

Figure 2: Index



Meanwhile, the symbolic component represented the most abstract level of signification, where

meaning is learned through cultural or conventional associations (Peirce, 1955). In Arabic Qirā'ah materials, symbols were used through color themes, typography, and culturally significant motifs—such as Arabic calligraphy or geometric patterns—to represent the spiritual and cultural depth of the texts. These design decisions helped maintain the authenticity of Arabic pedagogy while enhancing emotional connection and identity reinforcement among students (Kress & van Leeuwen, 2006).

The integration of Peirce's semiotics into message design not only improved aesthetic quality but also deepened interpretive comprehension. By combining iconic, indexical, and symbolic layers, the teachers produced materials that communicated meaning on multiple levels—visual, contextual, and linguistic. This semiotic layering corresponded with cognitive learning theories asserting that multimodal cues strengthen comprehension and retention (Clark & Mayer, 2016). Dr. Muhammad emphasized that this framework

empowered teachers to become “semiotic designers,” shaping meaning through deliberate message construction.

Figure 3: Icon and Symbol



Analysis of the students' feedback indicated a clear improvement in comprehension and engagement. Learners reported that images and visual cues made it easier to infer meanings of unfamiliar words, while layout signals helped them identify the structure of arguments within the text. The symbolic elements, such as Quranic calligraphic decorations

and thematic colors, increased the sense of cultural belonging and motivation to read Arabic texts (Rahman & Nurdin, 2022). This aligns with Peirce's notion that meaning arises dynamically from the interaction between the sign, its object, and the interpreter (Peirce, 1998).

From an analytical standpoint, the adoption of Peirce's model bridged the gap between message design principles and semiotic interpretation. Traditional instructional design often focuses on clarity and efficiency, while semiotics introduces depth and cultural resonance. By combining these perspectives, the teachers produced Qirā'ah materials that were not only didactically effective but also symbolically rich (Chandler, 2017). Dr. Muhammad highlighted this synthesis as a hallmark of innovation in Arabic material development—linking pedagogical design with interpretive communication.

Ultimately, the integration of Peircean semiotics contributed to a more holistic understanding of

Arabic reading instruction. The materials no longer functioned merely as linguistic tools but as multimodal learning media that reflect the interplay between sign, culture, and cognition. This finding suggests that future Arabic teaching material development should consider semiotic principles alongside instructional design frameworks to cultivate deeper and more meaningful learning experiences (Kress & van Leeuwen, 2006; Peirce, 1998).

Conclusion

The implementation of the community service program on developing Qirā'ah learning materials based on message design principles at STAI Darul Ulum Banyuanyar Pamekasan has demonstrated significant improvement in teachers' instructional competence and material quality. Through structured mentoring, training, and validation under the guidance of Dr. Jiddah Hassan Muhammad from the University of Maiduguri, Nigeria, the teachers successfully

transformed their conventional Qirā'ah texts into visually engaging, pedagogically structured, and semiotically meaningful learning resources. The results confirmed that applying message design principles—including clarity, visual hierarchy, and textual coherence—can significantly enhance students' motivation and comprehension (Clark & Mayer, 2016; Morrison, Ross, & Kemp, 2019).

A surprising finding emerged during the integration of Peirce's semiotic theory (icon, index, and symbol) in the material development process. Teachers initially viewed visual design as a decorative supplement, but through semiotic analysis, they realized that signs themselves carry pedagogical meaning and serve as interpretive aids. The presence of icons, indices, and symbols allowed students to connect linguistic content with visual and cultural cues, thereby deepening comprehension and emotional engagement (Peirce, 1998; Kress & van Leeuwen, 2006). This insight revealed that Qirā'ah material design can transcend

linguistic boundaries to become a semiotic experience that blends cognition, culture, and creativity.

Another unexpected outcome was the growth of intercultural collaboration between Indonesian and Nigerian educators. Dr. Muhammad's mentorship offered not only theoretical validation but also intercultural perspectives on Arabic pedagogy, emphasizing global standards in Qirā'ah teaching and the shared challenges faced across different educational contexts (Muhammad, 2023). This collaboration demonstrated the potential of cross-national partnerships in improving the quality of Arabic language instruction, enriching both pedagogical practice and professional development for teachers.

Despite its achievements, this project has several limitations. The mentoring duration was relatively short—three months—limiting the longitudinal observation of how redesigned materials influenced long-term student performance. Furthermore, the number of

participants was small, involving only five teachers, which restricts the generalizability of findings. Future studies should expand the participant base, apply quantitative measures to assess comprehension gains, and explore digital extensions of message design in Arabic e-learning environments. Nonetheless, this initiative provides a valuable model for integrating design science and semiotic theory in Arabic language education, bridging theory and practice in a culturally responsive way (Bringle & Hatcher, 2011; Mayer, 2017)..

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